SEARCH STATISTICS

Scores:

Mean 19

Median 73

Standard Deviation 42.88

50

Times:

CPU 00:01:14.89 Total Elapsed 00:03:25.00

Number of residues:

1211939

Number of sequences optimized:

3953

The scores below are sorted by optimized score. Significance is calculated based on optimized score.

3 100% identical sequences to the query sequence were found:

Sequence Name	Description	Length	Init. Score	Opt. Score	Sig. F	rane
1. P80713	Complete sequence of the matu	295	295	295	6.44	0
2. P80504	Sequence encoded by human tis	295	295	295	6.44	
3. P81503	Human tissue factor	295	295	295	6.44	

The list of other best scores is:

Seque	nce Name	Description	Length	Init. Score		Sig.	Frane
4.	P93986	**** 6 standard deviat Human tissue factor apop **** 5 standard deviat	orotei 295	293	293	6.39	0
5.	R28067	Sequence encoded by trur	rcated 251	251	251	5.41	0
	R39392 R07072	Truncated tissue factor Human tissue factor acti	. 218 vator 209	217 177	217 207	4.62 4.38	
8. 90. 112. 123. 14. 15. 16. 17. 18. 190. 222. 224. 226. 227. 228. 239. 331. 335. 336.	R10065 R14480 R22217 R22211 R22212 P70176 R08031 R05041 R12108 P93357 P94365 R04715 R04715 R04715 R27481 R27745 P80364 R06376 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R2768 R05701 R05	Human tissue factor active #### 3 standard deviat Newcastle disease virus Sequence of interleukin Sequence of interleukin Sequence of interleukin Sequence of Newcastle Di Adenyl cyclase from Bord Filamentous haemaglutin N-terminal deleted adeny Sequence of the catalyti Sequence of the catalyti Sequence of part of ader Amino acid sequence of the Amino acid sequence of the RP-III residual protease Extracellular factor rel M. leprae 65kD antigen. Product of the ssci gene Human carbastatin polype Epstein-Barr virus glycc Fibronectin binding protection binding protection Sequence of secretory in Mutant protease (deltail GAP6 encoded by lambda chypb protein. Lambda clone 101 proties L3T4 mutant M8. M. pneumoniae P1 cytadhe	ions above me (NDV) 553 immun 553 5 rec 415 5 (IL 415 5 (IL 398 isease 553 detell 1706 in A. 3647 il cyc 1445 ic dom 1522 in tub 560 the 65 572 the hu 573 immub 560 the 65 573 in tub 560 the 65 573 in tub 588 isease 1822 the hu 738 in tub 588 isease 1822 the hu 738 in tub 560 the 65 573 in tub 560 the 65 573 in tub 588 in tub 58			3.3177 3.1177 3.	000000000000000000000000000000000000000
38. 39.	R06723 P60723 R22219	Achromobacter protease l Sequence of extracellula Sequence of secretory in	i. 653 ar amy 918	6	151 151 151	3.08 3.08 3.08	0

1. FURM-969863-FIG2.PEP (1-295)

Complete sequence of the mature and precursor form

ID

AC DT

DE

DE

P80713 standard; peptide; 295 AA.
P80713;
10-SEP-1990 (first entry)
Complete sequence of the mature and precursor forms of human tissue factor heavy chain proteins (huTFh and pre-huTFh, respectively)
Human tissue factor heavy chain (huTFh); immunoassays;
precursor human tissue factor heavy chain (pre-huTFh);
human tissue factor detection. KW KW

KW OS human tissue factor detection.

FH

Homo sapiens. Location/Qualifiers Key Pantido

```
FT
                                 33..33
         Protein
Region
                                 33..62
         /note="claimed in claim 26.4"
         Region
                                 58..80
         /note="claimed in claim 26.1"
         Region
                                 62..103
         /note="claimed in claim 22"
         Region
                                 73..81
         /note="claimed in claim 26.6"
                                 88..103
         Region
         /note="claimed in claim 26.7"
         Region
                                 126..155
         /note="claimed in claim 26.9"
                                 178..199
         Region
         /note="claimed in claim 26.2"
                                 187..199
         Region
         /note="claimed in claim 23"
                                 193..222
         Region
         /note="claimed in claim 26.3"
         Region
                                 222..241
         /note="claimed in claim 26.1"
         W08807543-A.
         06-DCT-1988.
29-MAR-1988; U00998
         25-JUN-1987; US-067103,
PA
PI
        (SCRI-) Scripps Clinic Res.
Eddington TS, Morrissey JH;
WPI; 88-292837/41.
N-PSDB; N80743.
 DR
New DNA segment -
         has gene encoding human tissue factor heavy chain protein and is
        has gene encoding human tissue factor heavy chain protein and is useful for inhibiting coagulation
Disclosure; Fig 1 and Fig 2; 148pp; English.
It is the amino acid residue sequence of the predominant naturally occuring mature protein form residues 33 to 295. The sequence of the lesser found mature form begins at amino acid residue number 35 and ends at residue 295. A DNA segment which codes for it from about residue 33 to 295 is claimed in claim 2. Also claimed are antibodies which immunoreact with huTFH and the claimed peptides (see FT). The antibodies may be used in immunoassays for detection of huTFH. The claimed peptides may be used to inhibit the binding of huTF to coagulation factor VII/VIIa in vivo. The claimed peptides have an N-terminal H and a C-terminal OH.
         in vivo. The claimed peptides have an N-terminal H and a C-terminal OH. Sequence 295 AA; 16 A; 12 R; 16 N; 11 D; 0 B; 5 C; 10 Q; 21 E; 0 Z; 17 G; 1 H; 15 I; 20 L; 20 K; 2 M; 13 F; 14 P; 23 S; 30 T; 7 W; 12 Y; 30 V;
 SQ
                                 295 Optimized Score =
                                                                           295 Significance = 6.44
Initial Score
                                                                           295 Mišmatches =
Residue Identity =
                               100% Matches
                                    0
                                       Conservative Substitutions
Gaps
      METPAWPRVPRPETAVARTLLLGWVFA@VAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVN@VYTV@IST
     KSGDWKSKCFYTTDTECDLTDEIVKDVKQTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGQPT
      .
.
KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETALGOPT
                                            100
                                                           110
                                                                           120
                                                                                          130
                                                                                                         140
                                                        180
                                                                        190
      10SFEOVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
      I OSFEGVCTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIVTLYVWKSSSSGKKTAKTNTNEFLIDVDKGEN
                                                                        190
          150
                         160
                                         170
                                                        180
                                                                                       200
      220 230 240 250 260 270 280 YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
      VCFSVOAVIPSRTVNRKSTDSPVECMGOEKGEFREIFVIIGAVVFVVIILVIILAISLAKCRKAGVGOSWKE
       220
                      230
                                      240
                                                    250
                                                                    260
                                                                                    270
                                                                                                   280
    290
      NSPLNVS
      NSPLNVS
     290
2. FURM-969863-FIG2.PEP (1-295)
                        Sequence encoded by human tissue factor protein (T
```

ID P80504 standard; protein; 295 AA. AC P80504; DT 19-NOV-1990 (first entru)

DT 19-NOV-1990 (first entry)

DE Seguence encoded by hugan tissue factor protein (TEP) clone derived from

```
DE
          adipose cDNA library
 KW
          Hybridisation; coagulation; blood clotting; therapy.
 05
          Homo sapiens.
 FH
FT
FT
PN
PD
                                      Location/Qualifiers
          Key
          Peptide
                                      1..32
          Protein
EP-278776-A.
                                      33..295
          17-AUG-1988.
 PF
PR
          12-FEB-1988; 301190.
7-APR-1987; US-035409,.
          05-FEB-1988; US-152698.
(GETH) Genentech Inc.
 Lawn RM, Wion KL, Vehar GA;
WPI; 88-229602/33.
         N-PSDB; n81104.
Tissue factor protein and derivs. -
obtd. by recombinant deoxyribonucleic acid techniques, used to
treat chronic bleeding and coagulation-disorders
Claim 5; Fig 2a-2b; 39pp; English.
Tissue factor protein (IFP) free of substances from its natural source is
claimed. TFP is administered providing a coagulation inducing therapeutic
compsn. for various chronic bleeding disorders. Two oligo probes
representing one possible codon choice for each AA of the N-terminal AA
sequence (60 nucleotides) and internal AA sequence near the C-terminal
(81 nucleotides) were designed and sythesised. cDNA clones of human TFP
were obtd. using the DNA probes first to screen a human placental cDNA
library. 1400 BP EcoRI fragment from a placental clone was used to screen
a human adipose cDNA library. The full length human TFP cDNA was contd.
within the cDNA clone lambda TF14. The full length cDNA was inserted into
an expression plasmid and TFP was expressed using mammalian cells (COS)
cells and E.coli.
          N-PSDB; n81104.
          cells and E.coli.
Sequence 295 AA;
          16 A; 12 R; 16 N; 11 D; 0 B; 5 C; 10 Q; 21 E; 0 Z; 17 G; 1 H; 15 I; 20 L; 20 K; 2 M; 13 F; 14 P; 23 S; 30 T; 7 W; 12 Y; 30 V;
 SQ
 SQ
                                                                                     295 Significance = 295 Mismatches =
Initial Score
                                      295
                                              Optimized Score =
                                    100%
Residue Identity =
                                              Matches
                                                                                             Mismatches
                                               Conservative Substitutions
Gaps
                                      20
       METPAWPRVPRPETAVARTLLLGWVFA@VAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVN@VYTV@IST
       #ETPAWPRVPAPETAVARTLLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
                    10
                                      20
                                                       30
                                                                                                            60
                                                  100
                                                                   110
                                                                                     120
       KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGQPT
       .
KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
                 80
                                  90
                                                  100
                                                                   110
                                                                                     120
                                                                                                       130
                                                                                                                        140
                                                                                  190
                                                                                                   200
                                               170
                                                                180
       10SFE0VGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
       I ØSFE ØVGTKVNVTVE DERTLVRRNNTFLSLRDVFGKDLIVTLYV MKSSSSCKKTAKTNTNEFLIDVDKGEN
                                               170
                                                                180
                                                                                  190
                                                                                                   200
       YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
       YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
         220
                          230
                                           240
                                                             250
                                                                              260
                                                                                                270
     290
       NSPLNVS
       |||||||
NSPLNVS
     290
3. FURM-969863-FIG2.PEP (1-295)
     P81503
                           Human tissue factor
          P81503 standard; protein; 295 AA.
 AC
          P81503;
 DT
          22-OCT-1990 (first entry)
 DE
          Human tissue factor
 KW
          human tissue factor (HTF) apoprotein; procoagulant;
 KW
OS
          Factor VIII; ss.
          synthetic.
 FH
FT
FT
FT
          Kēy
                                      Location/Qualifiers
          Domain
                                      33..220
          /label=extracellular domain
Domain 221..243
           /label=membrane domain
 FT
FT
                                      244..263
          Donain
           /label=cytoplasmic domain
```

FT

```
FT
       /label=signal peptide
 PN
       W08809817<sup>-</sup>A.
 PD
       15-DEC-1988.
08-JUN-1988; U01915.
 PF
       2-JUN-1986; US-062166.
       14-MAR-1988; US-167870.
(MOUN-) Mount Sinai Sch Med, (UYYA-) Yale University
       (UYNY-) City Univ New York, (MOUN) Mount Sinai Hosp Res Fdn.
Menerson Y, Konigsberg W;
       WPI; 88-368631/5I.
       New recombinant cloning vehicle expressing human tissue factor - encoding DNA sequences, transformed cells and pure apoprotein
       prods
       Disclosure; pp; English.
A cloned 2147bp cDNA fragment isolated from human placental cDNA
       library encodes a single chain polypeptide preprotein 295 long.
       The signal sequence is post translationally cleaved to give a mature protein of 263 amino acids.
       HTF can be used for inhibiting binding of factor VIII to tissue
       factor.
       See also N81950-2.
       Sequence 295 AA;
16 A; 12 R; 16 N; 11 D; 0 B; 5 C; 10 Q; 21 E; 0 Z; 17 G; 1 H;
15 I; 20 L; 20 K; 2 M; 13 F; 14 P; 23 S; 30 T; 7 W; 12 Y; 30 V;
 SQ
 SØ
                            295
Initial Score
                                 Optimized Score =
                                                                     Significance =
                                                               295
Residue Identity =
                           100%
                                  Matches
                                                                     Mismatches
Gaps
                                  Conservative Substitutions
     METPAWPRVPRPETAVARTILLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
     METPAWPRVPRPETAVARTLLLGWVFAGVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNGVYTVGIST
              10
                            20
                                                      40
                                         30
                                                                   50
                                                                                60
     80 70 100 110 120 130 140
KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
     KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
            80
                         90
                                     100
                                                  110
                                                               120
                                                                           130
                                                                                        140
     IOSFEOVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
     i esfeevctkvnýt vedertlyrrnntflslrdyfgkoliytlyywkssssgkktaktnineflidydkgen
         150
                     160
                                  170
                                               180
                                                            190
                                                                         200
                                                                                      210
     YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
     YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
                   230
      220
                                240
                                             250
                                                          260
                                                                      270
                                                                                    280
   290
     NSPLNVS
     |||||||
|NSPLNVS
    290
4. FURM-969863-FIG2.PEP (1-295)
                    Human tissue factor apoprotein.
 10
       P93986 standard; protein; 295 AA.
       P93986;
       22-MAY-1990 (first entry)
Human tissue factor apoprotein.
Human tissue factor; coagulation system; anticoagulant; ds.
 DT
 DE
OS
FH
FT
FT
FT
FT
FT
FT
FT
       Homo sapiens.
                            Location/Qualifiers
       Key
       Sig_peptide
                            1..32
       /label= 32 AA leader
                            33..251
       Domain
       /label= Extracellular domain
                            252..274
       /label= Membrane domain
                            275..295
       Domain
       Jonain 2/5..295
/label= Cytoplasmic domain
EP-347262-A.
20-DEC-1989.
19-JUN-1989; 306176.
17-JUN-1988; US-208895.
(UYYA-) Yale Univ, (UYNY-) City Univ New York.
Nemerson Y, Konigsberg W;
WPSTR: N9-372479/51.
N-PSTR: N92782
PN
PD
PF
 PR
 PA
 PΙ
 DR
       N-PSDB; N92782.
 PT
       Cloning and expression of human tissue factor - for the prodm. of
 PT
```

ir roadonte, ant

```
Disclosure; pp; English.
         The protein is human tissue factor, which may be cloned from plasmid or bacteriophage vectors to produce pure or truncated tissue factor, useful for diagnostic reagents, anticoagulant agents and experimental purposes. Extracellular domain can be removed and used as a soluble tissue factor
         for use as diagnostic reagents, anticoagulant agents and experimental
         studies.
         Sequence
         15 A; 13 R; 16 N;
15 I; 20 L; 20 K;
                                         11 D; 0 B; 5 C; 10 Q; 21 E; 0 Z; 17 G; 1 H; 2 M; 13 F; 15 P; 24 S; 29 T; 6 W; 12 Y; 30 V;
 50
                                                                               293 Significance = 6.39
292 Mismatches = 3
                                                                               293
                                         Optimized Score =
Initial Score
Residue Identity =
                                   98%
                                           Matches
                                           Conservative Substitutions
Gaps
      METPAHPRVPRPETAVARTLLLGWVFA@VAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVN@VYTV@IST
      METPAWPRVPRPETAVARRLLLGWVFA@VAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVN@VYTV@IST
                                   20
                   10
                                                   30
                                                                    40
                                                                                    50
      80 90 100 110 120 130 140 KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
      ksgdwkskcfyttbtecdltdeivkdvkatylarvfsyppgnvestgsageplyenspeftpyletnigapt
                80
                                              100
                                                               110
                                                                               120
                                                                                               130
                                                                                                                140
      IOSFEOVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
      I OSFEGVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIVTLVVSKSSSSGKKTAKTNTNEFLIDVDKGEN
                                                           180
                                                                            190
                                                                                            200
                           160
                                           170
                                                                                                            210
                                                        250
        220
                                        240
                                                                         260
                                                                                         270
      YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
      YCFSVQAVIPSRTVNRKSTDSPVECMGQEKGEFREIFYIIGAVVFVVIILVIILAISLAKCRKAGVGQSWKE
        220
     290
      NSPLNVS
     290
5. FURM-969863-FIG2.PEP (1-295)

    Sequence encoded by truncated tissue factor (tTF)

 ID
         R28067 standard; Protein; 251 AA.
         02-APR-1993 (first entry)
 DT
         Sequence encoded by truncated tissue factor (tTF) cDNA. Activated factor VII; factor VIIa; truncated tissue factor.
 DΕ
 KW
 05
         Homo sapiens.
 FH
FT
FT
                                   Location/Qualifiers
         Key
         Peptide
                                   1..32
          /label= leader
         W09218870-A.
29-0CT-1992.
 PN
 PD
PF
         09-APR-1992; U02898.
 PR
PA
PI
         10-APR-1991; US-683682
          (OKLA-) OKLAHOMA MED RES FOUND.
         Morrissey JJ;
WPI; 92-382277/46.
 DR PTT PSC CCC CCC CCC CCC SQ SQ
         N-PSDB; @29716.
        Assay for factor VIIa utilising truncated tissue factor - used to monitor factor VIIa therapy in haemophiliac(s), to screen for elevated factor VIIa levels and assess risk of thrombosis Disclosure; Fig 1; 37pp; English.

Starting with clone pCIF543 a TF1-219 deletion mutant was constructed that contained the coding sequence for the predected leader peptide and extracellular domains, but lacked the predicted transmembrane and cytoplasmic domains. This version of the protein retains cofactor activity but fails to support conversion of
         retains cofactor activity but fails to support conversion of factor VII to VIIa . The essential difference between truncated tissue factor and wild-type tissue factor is that truncated tissue
         factor is no longer tethered to the phospholipid mambrane surface.
         Sequence 251 AA;
13 A; 11 R; 14 N; 11 D; 0 B; 4 C; 9 Q; 20 E; 0 Z; 14 G; 0 H;
7 I; 16 L; 17 K; 2 M; 11 F; 13 P; 19 S; 30 T; 6 W; 11 Y; 23 V;
                                                                               251 Significance = 5.41
251 Mismatches = 0
Initial Score
                                           Optimized Score =
Residue Identity =
                                  100%
                                          Matches
                                           Conservative Substitutions
Gaps
                                                   30
                                                                    40
      X 10 20 30 40 50 60 70
METPANPRYPRETAVARTI I LGWYEAGVAGASGTTNTVAAYNI TWKSTNEKTILENEPKPUNGYYTYGIST
```

```
HETPAUPROPRPETAVARTLLLGWOFAGVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNGOYTVGIST
                         20
                                     30
                                                40
                                                            50
    KSGDWKSKCFYTTDTECDLTDEIVKDVKQTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGQPT
                                 100
                                             110
                                                         120
                                                                     130
                                                                                140
                               170
                                           180
    IOSFEOVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
     lósfegygtkynytvédertlyrrnntflslrdyfgkdliytlyymkssssgkktaktnineflidydkgen
                                          180
                                                      190
                                                                              210
        150
                   160
                               170
                                                                  200
    220 230 240 X 260 270 280 YCFSVQAVIPSRTVNRKSTDSPVECMGQEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVGQSWKE
                                                                270
    YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFRE
     220
                 230
                            240
   290
    NSPLNVS
6. FURM-969863-FIG2.PEP (1-295)
                  Truncated tissue factor.
       R39392 standard; Protein; 218 AA.
      R39392;
       12-JAN-1994 (first entry)
       Truncated tissue factor.
      Monoclonal antibody; zymogen; rapid; protein isolation; calcium; presence; fusion protein; affinity chromatography.
      Homo sapiens.
WD9313211-A.
08-JUL-1993.
29-DEC-1992; U11270.
03-JAN-1992; US-816679.
PR
PA
PI
       (OKLA-) OKLAHOMA MED RES FOUND.
      Esmon CT, Morrissey JH, Rezaie A. WPI; 93-227327/28. N-PSDB; 045779.
      Fusion protein allowing rapid isolation of protein from soln. -
      comprises desired protein and epitope recognised by monoclonal
      antibody HPC-4
Disclosure; Page 24,25; 42pp; English.
      The sequence is that encoding truncated tissue factor, the
      truncated tissue factor protein lacks the predicted transmembrane and cytoplasmic domains of tissue factor. The truncated tissue
       factor is no longer tethered to the phospholipid membrane surface.
      This soluble tissue factor is not a cofactor for precursor factor
      VII (FVII).
      Sequence 218 AA;
7 A; 8 R; 14 N; 11 D; 0 B; 4 C; 8 Q; 18 E; 0 Z; 12 G; 0 H;
7 I; 13 L; 17 K; 1 M; 10 F; 9 P; 18 S; 27 T; 4 W; 11 Y; 19 V;
                         217 Optimized Score =
Initial Score
                                                         217 Significance =
Residue Identity =
                        100%
                                                         218
                               Matches
                                                               Mišmatches
Gaps
                               Conservative Substitutions
    METPAWPRVPRPETAVARTLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
                                           cttntvaavnitukstnektileweekevnovytvoist
                                                    10
                                                                20
    KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGQPT
    KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGGPT
   40
               50
                          60
                                      70
                                                  80
                                                              90
                                                                        100
                                                                                    110
                                           180
    IGSFEGVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYMKSSSSGKKTAKTNTNEFLIDVDKGEN
     I OSFEGVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIVTLVVWKSSSSGKKTAKTNTNEFLIDVDKGEN
           120
                       130
                                  140
                                              150
                                                          160
                                                                      170
     220
                             240
                                        250
                                                    260
                                                                270
                 230
    YCFSYGAVIPSRTVNRKSTDSPVECMGGEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVGGSWKE
    190
                     200
                                210
   290
```

ID

DT DE

KW KW OS

PN PD PF

50

NCPI NUC

```
7. FURM-969863-FIG2.PEP (1-295)
    R07072
                       Human tissue factor activator.
 ID
        RQ 072 standard; protein; 209 AA.
       RO/7073;
RO/7073;
RO/7073;
10-JAM-19: (first entry)
Human tissue factor activator.
Possed factor; menal disease; sandwich immunoassay.
Homo Sepiens.
U09008956-A.
 AC
 DT
 DE
 K₩
 05
 PN
 PD
         -AUG-1990
        02-FEB-1990; J90127.
02-FEB-1989; JP-022634.
17-FEB-1989; JP-036228.
18-APR-1989; JP-096456.
 PF
 PR
PR
        04-DEC-1989; JP-314602.
 PA
PI
        (TEIJ ) TEIJIN KK.
        Koike Y, Sumi Y, Ichikawa Y;
WPI; 90-261027/34.
 DR PT PS CC CC CC CC
        Human tissue factor activator detection in human urine - by
       Human tissue factor activator detection in numer urine - by sandwich immunoassay, for diagnosis of renal disease Disclosure; page 5; 54pp; Japanese. This apoprotein of human tissue factor (thromboplastin) differs from that of known serum tissue factor. Its presence in e.g. urine samples is determined using a sandwich immunoassay with one or more monoclonal antibodies (MAbs) to this sequence. One Ab is immobilized and the other lahelled with e.g. an enzume. It is
        immobilised and the other labelled with e.g. an enzyme. It is useful in the diagnosis of renal diseases such as nephritis,
        nephrosis and kidney stones. See also R07073.
 SQ
                       209 AA;
            A; 7 R; 14 N; 11 D; 0 B; 4 C; 7 Q; 15 E; 0 Z; 10 G; 0 H;
I; 13 L; 16 K; 1 M; 9 F; 9 P; 19 S; 27 T; 4 W; 10 Y; 19 V;
 SQ
 50
                                177
                                      Optimized Score =
                                                                       207
                                                                              Significance =
Initial Score
                               99%
                                                                       209
Residue Identity =
                                      Matches
                                                                              Mismatches
                                      Conservative Substitutions
Gaps
                                  1
                                                                           50
                                                                                          60
     METPAWPRVPRPETAVARTLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
                                                    SCHTNIVAAYNLI WKSINFKIILEWEPKPONGOYI VOIST
                                                                              20
                                                                10
                                          100
                                                        110
                                                                                     130
     KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
     KSGDWKSKCFVTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
                 50
                               60
                                              70
                                                                           90
                                                                                        100
                                                                                                       110
                                                                    190
                                       170
                                                                                  200
      I OSFEOVGTKVNVTVEDERTLYRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
      10SFEGVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDL1YTL-YWKSSSSGKKTAKTNTNEFLIDVDKGEN
             120
                           130
                                          140
                                                        150
                                                                        160
                                                                                                      180
                                    240 X
                                                  250
      YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
      190
                          500
    290
     NSPL
8. FURM-969863-FIG2.PEP (1-295)
                       Newcastle disease virus (NDV) F gene product.
        R10065 standard; Protein; 553 AA.
 ID
        R10065;
        14-MAR-1991 (first entry)
Newcastle disease virus (NDV) F gene product.
 DT
 DE
        Avipoxvirus; fowlpoxvirus; vacciñe.
 KW
 OS
        Newcastle disease virus.
 PN
        EP-404576-A.
 PD
        27-DEC-1990.
        21-JUN-1990; 306806.
22-JUN-1989; JP-160157.
 PA
        (JAPG ) NIPPON ZEON KK.
 PI
        Yangida N, Saeki S, Okawa S, Kmamogawa K, Iritani Y;
 ΡĪ
        Sawāguchi K;
₩PI; 91-001591/01.
 DR
 DR
        Q-PSDB; Q10060.
        Recombinant avipox virus - contg. CDNA coding for Newcastle
```

disease virus in region non-essential for proliferation, used as

PT

live varrine in foul

```
VII (FVII).
    Sequence 672 BP;
                     221 A;
                            137 C;
SQ
                                   161 G;
                644 Optimized Score = 658 Significance = 35.87
97% Matches = 662 Mismatches = 9
5 Conservative Substitutions = 0
Initial Score
Residue Identity =
                                         X 200
  TCGCTCGGACGCTCCTGCTCGGCTGGGTCTTCGCCCAGGTGGCCGCCGCTTCAGGCACTACAAATACTGTGG
                                         cccdcaccaccatatactata
                  240
                         250
                                 260
                                         270
   CAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCCAAACCCGTCAATC
   CAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCCAAAACCCGTCAATC
              40
                      50
                              60
                                     70
                                             80
  290
            110
     100
                    120
                           130
                                           150
                      390
                              400
                                      410
                                             420
   AGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTCTTCTCCTACCCGG
   170
          180
                  190
                          200
                                         220
                                  210
                                                 230
      440
             450
                            470
                                    480
                     460
   CAGGGAATGTGGAGAGCACCGGTTCTGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAGTTCACACCTTACC
  CAGGGAATGTGGAGAGCACCGGTTCTGCTGGGGGAGCCTCTGTATGAGAACTCCCCAGAGTTCACACCTTACC
                             280
  240
        250 260
                       270
                                      290
                                               300
                                                       310
                   530
                           540
                                   550
  TGGAGACAAACCTCGGACAGCCAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTAG
   330
                      340
                              350
                                      360
   AAGATGAACGGACTTTAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTTGGCAAGGACTTAA
  AAGATGAACGGACTTTAGTCAGAAGGAACAACAACTTTCCTAAGGCTCGGGGATGTTTTTGGCAAGGACTTAA
      390
           400 410 420 430
                                           440
                        680
                               690
                                       700
                670
   460
            470
                    480
                                   500
                                           510
                      750
                              760
   540
   530
                  550
                          560
                                  570
                                         580
                                                 590
                     820
                                    840
                            830
   GGAAGAGTACAGACAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGGGAATTCAGAGAAATATTCTACA-TC
  600
        610
                 620
                         630
                                640
                                        650
                                                 660
  ATTGGAGCTGTGGTÄTTTGTGGTCATCATCCTTGTCATCATCCTGGCTATATCTCT
   --taga
   670 X
7. FURM-969863-FIG2.SEQ (1-987)
          Sequence of the human COL1A1 gene extending from i
ID
    043701 standard; DNA; 5931 BP.
AC
DT
    Q43701;
    24-SEP-1993 (first entry)
Sequence of the human COL1A1 gene extending from intron 25 to exon
DE
DE
    Type 1 procollagen; COL1A1; COL2A1; osteoporosis; ss.
    Homo sapiens.
05
PN
    ₩09311149-A.
    10-JUN-1993.
PD
    01-DEC-1992; U10355.
PF
```

PR

```
180
                                                                                        210
                                                                                                           220
                                                                                                                             230
             170
                                                  190
                                                                                            350
       TCAAATAAGCACTAAGTCAGGAGATTGGAAAAGCAAATGCTTTTACACAACAGACACAGAGTGTGACCTCAC
       250
                                                                                                                          300
         240
                                              260
                                                                 270
                                                                                    280
                                                                                                       290
                                                  400
       CGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTCTTCTCCTACCCGGCAGGGAATGTGGA
       CGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTCTTCTCCTACCCGGCAGGGAATGTGGA
                        320
                                          330
                                                             340
                                                                                350
                                                                                                   360
                                                                                                                      370
     310
                                                                 480
       GAGCACCGGTTCTGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAGTTCACACCTTACCTGGAGACAAACCT
       GAGCACCGG++C+GC+GGGGGGGCC+C+G+A+GAGAAC+CCCCAGAG++CACCA+ACC++ACC+GGAGACAAACC+
                                                         410
                                                                            420
                                                                                               430
                                                                                                                  440
                    390
                                       400
     520
                                                             550
                                                                                560
       CGGACAGCCAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTAGAAGATGAACGGAC
       CGGYCYGCCYYCC CONTROL OF THE CONTROL
                460
                                   470
                                                      480
                                                                        490
                                                                                           500
                                                                                                              510
                                                                                                                                 520
                                                                            630
                                                                                                                  650
                    600
                                       610
                                                          620
       TTTAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTTGGCAAGGACTTAATTTATACACTTTA
       +++ag+cagaaggaacaacac+++cc+aagcc+ccggga+g++++++ggcaaggac++aa+++a+acac+++a
            530
                               540
                                                  550
                                                                     560
                                                                                        570
                                                                                                           580
                                                      690
                                                                         700
                                                                                           710
                                                                                                              720
       610
                                              620
         600
                                                                 630
                                                                                    640
                                                                                                       650
                                                                                                                          660
                                                                     770
                                                                                        780
                                                  760
       670
                        680
                                          690
                                                             700
                                                                                710
                                                                                                   720
                                                                                                                      730
                                                                                                                                         740
                                                                 840
                                              830
                                                                                    850
       ÇĂĞÇÇÇĞĞTAĞĂĞTĞTATĞĞĞÇĞAĞĞAĞAĞĞĞĞĞĞAĞTTÇAĞAĞAĞATATTÇTAÇATCATTĞĞAĞCTĞTĞĞT
       CAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGGAAATTTAGAGAATAAGAAATTC
       ÄTTIGTGGTCATCATCCTTGTCATCATCCTGGC
6. FURM-969863-FIG2.SEQ (1-987)
     045779
                             Truncated tissue factor gene.
 ID
           Q45779 standard; cDNA; 672 BP.
 AC
           045779;
 DT
           12-JAN-1994 (first entry)
 DE
           Truncated tissue factor gene.
 KW
KW
          Monoclonal antibody; zymogen; rapid; protein isolation; calcium; presence; fusion protein; affinity chromatography; tTF; ss.
 Homo sapiens.
          Key
CDS
                                        Location/Qualifiers
                                         4..660
           /#tag= a
           misc recomb
           /∦tag= b
                                         67..72
           misc_recomb
           /*tag= c
₩09313211-A.
          08-JUL-1993.
29-DEC-1992; U11270.
           03-JAN-1992; US-816679
           (OKLA-) OKLAHOMA MED RES FOUND.
           Esmon CT, Morrissey JH, Rezaie A.
WPI; 93-227327/28.
          P-PSDB; R39392.
           Fusion protein allowing rapid isolation of protein from soln.
           comprises desired protein and epitope recognised by monoclonal
           antibody HPC-4
          Example 1; Page 24,25; 42pp; English.
The sequence is that encoding truncated tissue factor, the
           truncated tissue factor protein lacks the predicted transmembrane and cytoplasmic domains of tissue factor. The truncated tissue
           factor is no longer tethered to the phospholipid membrane surface.
This soluble tissue factor is not a cofactor for precursor factor
```

```
<u>ACTÁATGAGÍTTÍTGATÍGATGTGGATÁAAGGAGAAAACTACTGTTTCAGTGTTCAAGCAGTGATTCCCTCC</u>
                                            750
                                                           760
     CGAACAGTTAACCGGAAGAGTACAGACAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGGAATTCAGAGAA
      LGAACAG++AACCGGAAGAG+ACAGACAGCCCCGG+AGAG+C+A+GGGCCAGGAGAAAGGGAA++CAGAGAA
             800
                           810
                                         820
                                                        830
                                                                       840
                                                                                     850
                                                                                                    860
      ATATTCTACATCATTGGAGCTGTGGTATTTGTGGTCATCATCCTTGTCATCATCCTGGCTATATCTCTACAC
                                                                                  920
          870
                        880
                                       890
                                                     900
                                                                    910
                                                     960
      AAGTGTAGAAAGGCAGGAGTGGGGCAGAGCTGGAAGGAGCTCCCCACTGAATGTTTCATAA
     AAGTGTAGAAAGGCAGAGTGGGGAGAGCTGGAAGGAGAACTCCCCACTGAATGTTTCATAAAGGGAAGCAC
       940
                     950
                                   960
                                                  970
                                                                 980
                                                                               990
                                                                                            1000
      TGTTGGAGCTACTGCAAATGCTATATTGCACTGTGACCGAG
                1020
                              1030
   1010
5. FURM-969863-FIG2.SEQ (1-987)
                      Sequence of truncated tissue factor (tTF) cDNA.
        029716 standard; cDNA; 795 BP.
        02-APR-1993 (first entry)
 DT
        Sequence of truncated tissue factor (tTF) cDNA.
 DE
 ΚW
        Activated factor VII; factor VIIa; truncated tissue factor; ss.
 05
        Homo sapiens.
FH FT FT FT FT PN
                               Location/Qualifiers
        Key
        sig_peptide
/*tag= a
                               1..33
        CDS
                               34..130
        /#tag= b
         /product= leader peptide
        WD9218870-A.
 PD
        29-OCT-1992.
        09-APR-1992; U02898.
10-APR-1991; US-683682.
 PF
 PR
PA
PI
DR
        (OKLA-) OKLAHOMA MED RES FOUND.
        Morrissey JJ;
WPI; 92-382277/46.
P-PSDB; R28067.
 DR
PT
PT
PS
CC
CC
CC
CC
CC
        Assay for factor VIIa utilising truncated tissue factor - used to monitor factor VIIa therapy in haemophiliac(s), to screen for elevated factor VIIa levels and assess risk of thrombosis
       Disclosure: Fig 1; 37pp; English.
Starting with clone pCIF543 a TF1-219 deletion mutant was constructed that contained the coding sequence for the predected
       leader peptide and extracellular domains, but lacked the predicted transmembrane and cytoplasmic domains. This version of the protein retains cofactor activity but fails to support conversion of factor VII to VIIa. The essential difference between truncated tissue factor and wild-type tissue factor is that truncated tissue factor is no longer tethered to the phospholipid mambrane surface. Sequence 795 BP; 234 A; 186 C; 199 G; 176 T;
                                                                       785 Significance = 43.73
786 Mismatches = 9
Initial Score
                                781
                                      Optimized Score =
Residue Identity =
                               98%
                                                              =
                                      Matches
                                     Conservative Substitutions
Gaps
      GGCCGGCCCAGGGCGCCTTCAGCCCAACCTCCCCAGCCCCACGGGCGCCACGGAACCCGCTCGATCTCGCCG
                                                                                   -TTCCGC+CGA+C+CGCCG
     CCAACTGGTAGACATGGAGACCCCTGCCTGGCCCCGGGTCCCCGGGCCCCGAGACCGCCGTCGCTCGGACGCCCCCGAGACCCCCGAGACCCCCGCGCCCCGGGCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCGGAGACCCCCG
                                                            60
                                                              200
                                                                             210
      CCTGCTCGGCTGGGTCTTCGCCCAGGTGGCCGGCGCTTCAGGCACTACAAATACTGTGGCAGCATATAATTT
     cctgctcggctgggtcttcgcccaggtggccggcttcaggcactacaaatactgtggcagcatataaattt
             100
                           110
                                         120
                                                        130
                                                                      140
                                                                                     150
```

<u>┧┧┝</u>╃┼╏┧┧┧╀╱┧┧╀┧┧╁╀┼┆┧┟╏╱┧┧┧╀┼┼╏╏┧┞┼╏╏┆┼╏┆┆┧╏╏┞┞┆┆┼┆┧┧┼┞┧┧┼┼

```
Sig_peptide
                                                             112..207
  FT
FT
                 /±tag= a
                 Mat_peptide
                                                             208..999
                /*tag= c
EP-347262-A.
  FT
  PN
PD
                20-DEC-1989.
19-JUN-1989; 306176.
  PF
  PR
                 17-JUN-1988; US-208895.
(UYYA-) Yale Univ, (UYNY-) City Univ New York.
 PA
PI
                Nemerson Y, Konigsberg W; WPI; 89-372479/51.
  DR
 DR PT PS CC CC CC
                 P-PSDB; P93986.
                Cloning and expression of human tissue factor - for the prodn. of diagnostic reagents, anticoagulant agents and for experimental studies.
                 Disclosure: pp; English.
               cDNA fragment codes for the entire human tissue factor gene, which may be cloned into plasmid or bacteriophage vectors to produce pure or truncated tissue factor, useful for diagnostic reagents, anticoagulant agents and experimental purposes.

Sequence 2147 BP; 613 A; 455 C; 477 G; 602 T;
  SQ
                                                             983 Optimized Score =
                                                                                                                                        983
Initial Score
                                                                                                                                                      Significance = 55.32
Residue Identity =
                                                                                                                                        983 Mišmatches
                                                                          Matches
                                                                          Conservative Substitutions
Gaps
                                                                                                                                                                                   50
                                             <u>ĈTCGCACTĈĈCTCTGGCCĞĞCCCAGGGCĞČCTTCAGCCCĂACCTCCCCĂĞCCCCACGGĞČ</u>
          CGGGCGAACCCCCTCGCACTCCTCTGGCCGGCCCCAGGGCGCCTTCAGCCCAACCTCCCCAGCCCACCGGGC
                                 10 X
                                                             20
                                                                                                                    40
                                                                                                                                                 50
                                                                                                                  100
                                                                                         90
          90
                                                                                100
                           80
                                                                                                            110
                                                                                                                                        120
                                                                                                                                                                    130
                                                                                                                                                                                                 140
          140 150 160 170 180 190 200 CCCGAGACCGCCGTCGGCTCCTGCTCGGCTGGGTCTTCGCCCAGGTGGCCGGCGCTTCAGGCACT
           ccceyever.
                                                                           170
                                                                                                       180
                   150
                                               160
           ACAAATACTGTGGCAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCC
           250
                                                                                                                            260
             550
                                         230
                                                                     240
                                                                                                                                                         270
           AAACCCGTCAATCAAGTCTACACTGTTCAAATAAGCACTAAGTCAGGAGATTGGAAAAGCAAATGCTTTTAC
           AAACCCC+CAA+CAAG+C+ACAC+G++CAAA+AAGCAC+AAG+CAGGAGA++GGAAAAGCAAA+GC++++AC
        290
                                    300
                                                                310
                                                                                           320
                                                                                                                                                    340
                                                                                                                                                                                350
                                                                                                                                                                                                            340
        350
           ACAACAGACACAGAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTC
           ACAACAGACACAGAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTC
                                                                                      390
                               370
                                                          380
                                                                                                                  400
                                                                                                                                              410
                                                                                                                                                                          420
                                                                                                                                                                                                      430
           TTCTCCTACCCGGCAGGGAATGTGGAGAGCACCGGTTCTGCTGGGGGAGCCTCTGTATGAGAACTCCCCAGAG
           ++c+cc+accccccagggaatgtegagagcaccggttctectggggagcctctgtateagaactccccagag
                         440
                                                    450
                                                                                460
                                                                                                            470
                                                                                                                                        480
                                                                                                                                                                     490
                                                                                                                                                                                                 500
           TTCACACCTTACCTGGAGACAAACCTCGGACAGCCAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTG
           ++CACACC++ACC+GGAGACAAACC+CGGACAGCCAACAA++CAGAG++++GAACAGG+GGGAACAAAAG+G
                   510
                                               520
                                                                           530
                                                                                                       540
                                                                                                                                   550
                                                                                                       600
                                                                                                                                   610
           AATGTGACCGTAGAAGATGAACGGACTTTAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTT
           HTTTALAGOSS SALES 
             580
                                         590
                                                                     600
                                                                                                 610
                                                                                                                            620
                                                                                                 670
                                                                                                                            680
                                                                                                                                                         690
                                                                     660
           PHYPORIAN PROPERTY OF THE PROP
        650
                                                               670
                                    660
                                                                                           680
                                                                                                                                                    700
                                                                                                                                                                                710
                                                                                                                                                                                                           720
        710
                                                               730
                                                                                           740
                                                                                                                       750
                                                                                                                                                    760
           ACTAATGAGTTTTTGATTGATGTGGATAAAGGAGAAAACTACTGTTTCAGTGTTCAAGCAGTGATTCCCTCC
```

```
80
             90
                   100
                          110
                                 120
                                       130
                                              140
                        180
                               190
                                      200
  GTCGCTCGGACGCTCCTGCTCGGCTGGGTCTTCGCCCAGGTGGCCGGCGCTTCAGGCACTACAAATACTGTG
    150
           160
                  170
                        180
                                      200
                240
  GCAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCCAAACCCGTCAAT
  230
   220
                240
                       250
                                    270
                                           280
                              540
  290
  290
        300
               310
                      320
                            330
                                   340
                                          350
                                                 360
                    390
                           400
  GAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTCTTCTCCTACCCG
  370
                                  410
              380
                    390
                           400
                                        420
                                               430
                                480
  GCAGGGAATGTGGAGAGCACCGGTTCTGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAGTTCACACCTTAC
  440
            450
                   460
                          470
                                480
                                       490
                                              500
                  530
                        540
                                      560
  CTGĞAĞACAAACCTCĞGACAGCCÄACAATTCAGAĞTTTTGAACAĞĞTGGGAACAAAAGTGAATGTGACCGTA
  540
    510
           520
                  530
                               550
                                      560
   580
                600
                       610
                              620
                                    630
  GAAGATGAACGGACTTTAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTTGGCAAGGACTTA
  580
         590
                600
                       610
                              620
                                    630
                                           640
                            690
                                   700
 650
               670
                      680
        660
                                          710
  650
        660
               670
                      680
                            690
                                   700
  730 740 750 760 770 780 790 TTGATTGATGTGTGTGATGAGCAGTGATTCCCCCGAACAGTTAAC
  730
             740
                    750
                           760
                                  770
                                        780
  800 810 820 830 840 850 860 CGGAAGAGTACAGACAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGGGAATTCAGAGAAATATTCTACATC
  830
     800
            810
                   820
                                840
                                       850
                                              860
  ATTGGAGCTGTGGTATTTGTGGTCATCATCCTTGTCATCATCCTGGCTATATCTCTACACAAGTGTAGAAAG
  870
           880
                  890
                        900
                               910
                                      920
                                            930
                960
                       970
  GCAGGAGTGGGGCAGAGCTGGAAGGAGAACTCCCCACTGAATGTTTCATAA
  dchagaateagaachaachaachaahachaachaateantah tallaagaagcactgttgaagctac
                       970
                              980
   940
         950
                960
                                    990
  TGCAAATGCTATATTGCACTGTGACCGAG
 1010
       1020
              1030
4. FURM-969863-FIG2.SEQ (1-987)
          cDNA of entire human tissue factor apoprotein.
ID
   N92782 standard; cDNA; 2147 BP.
   N92782;
   22-MAY-1990 (first entry)
DT
DE
   cDNA of entire human tissue factor apoprotein.
   Human tissue factor; coagulation system; anticoagulant; ds.
OS
FM
   Homo sapiens.
              I mestinm/Arralifiame
```

```
650
      ACTAATGAGTTTTTGATTGATGTGGATAAAGGAGAAAACTACTGTTTCAGTGTTCAAGCAGTGATTCCCTCC
                                                  750
                                  740
                                                                  760
      CGAACAGTTAACCGGAAGAGTACAGACAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGGAATTCAGAGAA
      CGAACAC++AACCGGAAGAGAGACACCCCGG+AGAG+G+A+GGGCCAGGAGAAAGGGGAA++CAGAGAA
              800
                              810
                                              820
                                                               830
                                                                               840
                                                                                                850
      ATATTCTACATCATTGGAGCTGTGGTATTTGTGGTCATCATCCTTGTCATCATCCTGGCTATATCTCTACAC
                                           890
                                                            900
                                                                            910
                                                                                             920
                                                                                                             930
           870
                           880
                                                            960
      AAGTGTAGAAAGGCAGGAGTGGGGCAGAGCTGGAAGGAGCTCCCCACTGAATGTTTCATAA
      AAGTGTAGAAAGGCAGGAGTGGGGAGAGCTGGAAGGAGAACTCCCCACTGAATGTTTCATAAAGGAAGCAC
                       950
                                        960
                                                        970
                                                                         980
                                                                                         990
        940
                                                                                                        1000
      TGTTGGAGCTACTGCAAATGCTATATTGCACTGTGACCGAG
                  1020
                                  1030
3. FURM-969863-FIG2.SEQ (1-987)
                         Sequence of human tissue factor protein (TFP) clon
         N81104 standard; DNA; 2127 BP.
 ID
 AC
         N81104;
         19-NOV-1990 (first entry)
         Sequence of human tissue factor protein (TFP) clone derived from
 DE
 ĎĒ
          adipose cDNA library
 Κ₩
         Hybridisation; coagulation; blood clotting; therapy; ds.
 OS
FH
FT
FT
FT
PN
PD
         Homo sapiens.
         Key
                                   Location/Qualifiers
         sig_peptide
/*tag= a
                                   100..195
         mat_peptide
                                   196..987
         /∗tag= b
         EP-278776-A.
         17-AUG-1988.
12-FEB-1988; 301190
 PF
 PR
         7-APR-1987; US-035409,.
 PR
PA
PI
DR
         05-FEB-1988; US-152698.
(GETH) Genentech Inc.
         Lawn RM, Wion KL, Vehar GA;
WPI; 88-229602/33.
P-PSDB; P80504.
        P-PSDB; P80504.

Tissue factor protein and derivs. —
obtd. by recombinant deoxyribonucleic acid techniques, used to
treat chronic bleeding and coagulation—disorders
Claim 4; Fig 2a-2b; 39pp; English.
Tissue factor protein (TFP) free of substances from its natural source is
claimed. TFP administered to provide a coagulation inducing therapeutic
compsm. for various chronic bleeding disorders. Two oligo probes
representing one possible codon choice for each AA of the N-terminal AA
sequence (60 nucleotides) and internal AA sequence near the C-terminal
(81 nucleotides) were designed and sythesised. cDNA clones of human TFP
were obtd. using the DNA probes first to screen a human placental cDNA
library. 1400 BP EcoRI fragment from a placental clone was used to screen
a human adipose cDNA library. The full length human TFP cDNA was contd.
within the cDNA clone lambda TF14. The full length cDNA was inserted into
an expression plasmid and TFP was expressed using mammalian cells (CDS)
cells and E.coli.
 cells and E.coli.
         Sequence 2127 BP;
                                             606 A;
                                                            450 C;
                                                                           472 G;
                                   987
                                                                                987
Initial Score
                                           Optimized Score =
                                                                                       Significance = 55.55
                                                                                987 Mišmatches
Residue Identity =
                                  100%
                                           Matches
                                                                       =
Gaps
                                       0
                                           Conservative Substitutions
                                                    30
      CTCGCACTCCCTCTGGCCGGCCCAGGGCGCCTTCAGCCCAACCTCCCCAGCCCCACGGGCGCACGGAACCC
      ctcgcactccctctggccggcccacggccttcagcccaacctcccagccccacgggcccaacggaaccc
                   10
                                   50
                                                    30
```

```
FTT FTT FTT FTT PDD PFR PA PI
      /*taq= a
      /product=human tissue factor
sig_peptide 112..207
      sig_peptide
/#tag= b
      mat_peptide
                      208..996
      /*tag= c
/product=apoprotein
W08809817-A.
      15-DEC-1988.
08-JUN-1988; U01915.
2-JUN-1986; US-062166.
      14-MAR-1988; US-167870.
      (MOUN-) Mount Sinai Sch Med, (UYYA-) Yale University, (UYNY-) City Univ New York, (MOUN) Mount Sinai Hosp Res Fdn. Menerson 7, Konigsberg W;
DR PT PT PS CC CC CC CC
      WPI: 88-368631/51.
      New recombinant cloning vehicle expressing human tissue factor - encoding DNA sequences, transformed cells and pure apoprotein
      Disclosure; pp; English.
The fragment encodes a single chain polypeptide preprotein 295
      long. The signal sequence is post translationally cleaved to give a mature protein of 263 amino acids.
HTF can be used for inhibiting binding of factor VIII to tissue
CC
      See also N81950-2.
Sequence 2147 BP;
                             613 A;
                                      454 C;
                                                477 G;
SQ
                                                         603 T;
                     987 Optimized Score = 100% Matches =
                                                   987
                                                        Significance = 55.55
Initial Score
                                                   987 Mismatches
Residue Identity =
Gaps
                          Conservative Substitutions
                CTCGCACTCCCTCTGGCCGGCCCAGGGCGCCTTCAGCCCAACCTCCCCAGCCCCACGGGC
    CGGGCGAACCCCCTCGCACTCCCTCTGGCCGGCCCCAGGGCGCCTTCAGCCCCAACCTCCCCAGCCCCACGGGC
                                                      50
                                          100
    90
    80
                           100
                                        110
                                                  120
                                                                        140
    CCCGAGACCGCCGTCGCTCGGACGCTCCTGCTCGGCTGGGTCTTCGCCCAGGTGGCCGGCGCCTTCAGGCACT
       150
                 160
                            170
                                      180
    ACAAATACTGTGGCAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCC
    550
               230
                         240
                                    250
                                               260
    AAACCCGTCAATCAAGTCTACACTGTTCAAATAAGCACTAAGTCAGGAGATTGGAAAAGCAAATGCTTTTAC
    AAACCCGTCAATCAAGTCTACACTGTTCAAATAAGCACTAAGTCAGGAGATTGGAAAAAGCAAATGCTTTTAC
                       310
                                  320
                                            330
                                                       340
    ACAACAGACACAGAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTC
    ACAACAGACACAGAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTC
                                390
           370
                     380
                                          400
                                                     410
                                                                420
                                450
    TTCTCCTACCCGGCAGGGAATGTGGAGAGCACCGGTTCTGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAG
    +tc+cctacccggcaggaatgtggaggcaccggttctgctggggagcctctgtatgagaactcccagag
         440
                   450
                                                              490
                                                                        500
                              460
                                        470
                                                   480
    TTCACACCTTACCTGGAGACAAACCTCGGACAGCCAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTG
    510
                 520
                            530
                                      540
                                                 550
                                      600
                                                 610
    AATGTGACCGTAGAAGATGAACGGACTTTAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTT
    580
                          600
                                   610
                                    670
                          660
                                               680
```

<u> ϽΑΑΑΛΑΑΑΛΌ ΊΑ ΑΑΤΤΑΑΙΑΑΛΑΙΘΑΝΤΙΝΑΑΝΤΙΝΙΑΑΑΝΟΙΙΚΑΙ ΤΙΝΑΙΑΙΤΑΝΑΙΚΑΙ ΤΑΙΤΙΝΑΝΟΙΚΑΙ ΤΟ ΑΝΟΙΑΑΝΟΙΝ</u>

```
500
   GCTGGGTCTTCGCCCAGGTGGCCGGCGCTTCAGGCACTACAAATACTGTGGCAGCATATAATTTAACTTGGA
     230
                      240
                                                        260
                                                                         270
                                                                      280
                                   590
   330
 300
                                   320
                                                                                                                         370
                                                 340
                                                                  350
                                                                                    360
                                330
   GCACTAAGTCAGGAGATTGGAAAAGCAAATGCTTTTACACAACAGACACAGAGTGTGACCTCACCGACGAGA
   390
               380
                                                 400
                                                                  410
                                                                                    420
                                                                                                     430
                                                                                                                      440
   390 400 410 420 430 440 450 TTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTCTTCTCCTACCCGGCAGGGAATGTGGAGGACCCG
   ++6+64A66A+6+6AA6CA6ACC+AC++66CAC6GC+C++C+CC+ACCC6GCAAC6GAA+C+6GAAGACACC6
                                              470
                                                               480
                                                                                490
                                                           490
   GTTCTGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAGTTCACACCTTACCTGGAGACAAACCTCGGACAGC
   520
                         530
                                          540
                                                           550
                                                                             560
                                                                                              570
                                                                                                               580
   530 540 550 560 570 580 590 CAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTAGAAGATGAACGGACTTTAGTCA
                                      610
                                                        620
                                                                         630
   GAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTTGGCAAGGACTTAATTTATACACTTTATTATTGGA
   $\delta \delta \
 660
                  670
                                   680
                                                 690
                                                                   700
                                                                                    710
   770
                                                                                   780
                                                                                                     790
                               750
                                                 760
                                                                                                                      800
   810
                            820
                                             830
                                                               840
                                                                                850
   820 830 840 850 860 870 880 TAGAGTGTATGGGCCAGGAGAAAGGGGGAATTCAGAGAAATATTCTACATCATTGGAGCTGTGGTATTTGTGG
   880
                         890
                                          900
                                                           910
                                                                             920
                                                                                              930
                                                                                                               940
                                                        920
   TCATCATCCTTGTCATCCTGGCTATATCTCTACACAAGTGTAGAAAGGCAGGAGTGGGGCAGAGCTGGA
   950
                                      970
                                                        980
                                                                         990
                                                                                         1000
                      960
 960
                  970
                                   980
   AGGAGAACTCCCCACTGAATGTTTCATAA
   AGGAGAACTCCCCACTGAATGTTTCATAAAGGAAGCACTGTTCGAGCTACTGCAAATGCTATATTGCACTGT
1020
                1030
                                 1040
                                                  1050
                                                                   1060
                                                                                     1070
   GACCGAG
```

2. FURM-969863-FIG2.SEQ (1-987) N81953 Encodes human tissue factor

```
N81953 standard; cDNA; 2147 BP.
ID
AC
     N81953;
DT
     22-0CT-1990 (first entry)
     Encodes human tissue factor
human tissue factor (HTF) apoprotein; procoagulant;
DE
KW
     Factor VIII; ss.
OS
     synthetic.
FH
     Keu
                        Location/Qualifiers
```

```
11. 020269
                          Gene encoding AE-III (peptidu
                                                                     3383
                         DHFR-APP fusion protein (pBBR Sequence encoding 53 kD cellu Encodes E-cadherin from dog k
   12. 025107
                                                                     4670
                                                                                              5.34
                                                                                                        0
                                                                              112
                                                                                      416
   13. 022995
                                                                     1182
                                                                              110
                                                                                      420
                                                                                               5.22
                                                                                              5.22
                                                                                      432
  14. 011563
                                                                              110
                                                                     4333
                                                                                      432
                                                                                              5.05
                                                                                                        Ö
   15. 039967
                         PKC-alpha cDNA.
                                                                     3305
                                                                              107
                         Sequence of human factor IX g
Sequence of human factor IX g
                                                                                              5.05
5.05
   16. N40141
                                                                              107
                                                                                      402
                                                                   11866
  17. N40176
                                                                                      401
                                                                                                        0
                                                                              107
                                                                   11873
                           **** 4 standard deviations above mean ****
                         Interferon-pseudo-omega-2.
Non-receptor linked protein t
                                                                                      420
385
                                                                                              4.94
4.94
  18. N60202
                                                                                                        0
                                                                     2132
                                                                              105
  19.
        013802
                                                                     2287
                                                                              105
                         Maize C3 sequence encoding ac
BamHI J-I fragment carrying s
BamHI J-I fragment carrying s
Bacillus thuringiensis var. i
  20. 003661
                                                                     2546
                                                                              105
                                                                                      421
                                                                                              4.94
                                                                     2721
                                                                                      395
                                                                              104
                                                                                              4.88
                                                                                                        0
  21. 010543
  22.
       010212
                                                                     2721
                                                                              104
                                                                                      395
                                                                                              4.88
  23. N50525
                                                                     3756
                                                                                      422
259
                                                                              104
                                                                                              4.88
  24. 032366
                                                                      920
                         MAGE-10 genomic DNA.
                                                                              102
                                                                                              4.76
                         Recombinant plasmid pMP1 cont
Sequence of LAV/HTLV III gag
Sequence of ARV-2 cloned in p
  25. N81341
                                                                     4133
                                                                                      409
                                                                                              4.76
                                                                              102
                                                                                      431
                                                                     5340
                                                                              102
  26. N71017
                                                                                              4.76
  27. N60142
                                                                     2467
                                                                              101
                                                                                      324
                                                                                              4.71
  28. 031938
29. 013673
                         p41 gag gene (fusion of p25 g
SUP-B27 t(1;19) translocation
E2A/pr1 fusion transcript fro
                                                                                      323
422
                                                                     2467
                                                                              100
                                                                                              4.65
                                                                     2837
                                                                               99
                                                                                              4.59
  30. 013675
                                                                    2922
                                                                                      421
                                                                                              4.59
                         pTK gene HpTK5.
Sequence encoding an antibody
M13IX421.
                                                                                      409
                                                                               99
  31. 049757
                                                                     3969
                                                                                              4.59
                                                                                              4.53
4.53
  32. 045503
                                                                     1657
                                                                               98
                                                                                      356
  33. 024174
                                                                     7294
                                                                               98
                                                                                      415
                                                                                              4.53
4.53
4.48
   34. 024172
                         M131X30.
                                                                     7445
                                                                               98
                                                                                      414
                                                                                      428
354
  35.
       014752
                         HIV-1(MN-ST1) env protein-enc
                                                                     9746
                                                                                98
       012528
                                                                               97
                                                                     1611
  36.
                         Thymidylate phosphohydrolase.
                         PT42 promoter and 5' gene por M13IX22.
  37. 027487
                                                                     2370
                                                                               97
                                                                                      382
                                                                                              4.48
                                                                               97
  38. 024171
                                                                                      411
                                                                                              4.48
                                                                     7320
  39. 033150
                         CAT-LacZ alpha-peptide trans-
                                                                      623
                                                                                      243
                                                                                              4.42
       027243
                                                                      623
                                                                                      243
                                                                                              4.42
                         CAT-LacZ alpha-peptide trans-
1. FURM-969863-FIG2.SEQ (1-987)
                     Thromboplastin clone 2b-Apr5.
        020349 standard; cDNA; 2189 BP.
 ID
 AC
        020349;
        09-APR-1992 (first entry)
Thromboplastin clone 2b-Apr5.
 DT
 DE
 KW
        Thromboplastin; Ig; fusion protein; ss.
 05
        Homo sapiens.
 FH
        Key
CDS
                             Location/Qualifiers
                             160..1044
 FT
        /*tag=
        /labél= thromboplastin
 PN
        EP-464533-A.
 PD
        08-JAN-1992.
        24-JUN-1991; 110368.
28-JUN-1990; DE-020607
 PF
 PR
 PA
        (BEHW ) BEHRINGWERKE AG.
 PA
PI
        (GEHO-) GENERAL HOSPITAL CORP.
        Lauffer L. Oquendo P. Zettlmeiss G. Seed B;
 DR
        WPI; 92-009794/02.
 PT
PT
        Soluble fusion protein useful in treatment or diagnosis - contg.
       immunoglobulin constant region and e.g. thromboplastin, cytokine or receptor, expressed in mammalian cells
Disclosure; Fig 2; 2ipp; German.
Based on the thromboplastin DNA sequence published by Scarpati et al., Biochemistry, Bd. 26 (1987), 5234-5238, two oligonucleotide probes are derived (020350-51). A human placenta cDNA bank is screened.
        Several clones are obtained and clone 2b-Apr5 is isolated. The derived
        amino acid sequence is as described by Scarpati et al. See also 020349-57.
 CC
                      2189 BP;
        Sequence
                                      617 A;
                                                    470 C;
                                                                  487 G;
                                                                               615 T;
                             987
Initial Score
                                    Optimized Score =
                                                                        Significance = 55.55
Residue Identity
                            100%
                                                                  987
                                    Matches
                                                                        Mismatches
                                0
                                    Conservative Substitutions
Gaps
                                                                         X 10 20 CTCGCACTCCCTCTGGCCGGCC
     GAGGTCGACGGTATCGATAAGCTTGATATCGAATTCTCTCGGCGAACCCCTCGCACTCCCTCTGGCCCCC
                20
                                           40
                                                        50
                                                                                                 80
     CAGGGCGCCTTCAGCCCAACCTCCCCAGCCCCACGGGCGCCACGGAACCCGCTCGATCTCGCCGCCAACTGG
     CAGGGGCC++CAGCCCAACC+CCCAGCCCCACGGGCCACGGAACCCGC+CGA+C+CGACCCAAC+GG
                         100
                                       110
                                                    120
                                                                  130
                                                                               140
                                                                                             150
                                                               140
     TAGACATGGAGACCCCTGCCTGGCCCCGGGTCCCGCGCCCCGAGACCGCCGTCGCTCGGACGCTCCTGCTCG
```

170

180

190

200

210

```
Hartzell, S.; Ryder, K.; Lanahan, A.; Lau, L.F.; Nathans, D. Mol. Cell. Biol. (1989) 9:2567-2573
    #authors
    #journal
    $title
                    A growth factor-responsive gene of murine BALB/c 373 cells
    encodes a protein homologous to human tissue factor. #cross-references MVID:89343974
                    A32318
    #accession
        ##molecule_type mRNA
                         1-294 ##label HAR
        ##residues
        ##cross-references GB:M26071
 REFERENCE
                    A39046
                    Ranganathan, G.; Blatti, S.P.; Subramaniam, M.; Fass, D.N.;
    #authors
                      Maihle, N.J.; Getz, M.J.
                     . Biol. Chem. (1991) 266:496-501
    #journal
                    Cloning of murine tissue factor and regulation of gene
    #title
    expression by transforming growth factor type betal. #cross-references MUID:91093171
    #accession
                    A39046
        ##molecule_type mRNA
                         1-25,'I',27-294 ##label RAN
        ##residues
       ##cross-references GB:J05713
                         26-Thr was also found
       ##note
             Tissue factor is an integral membrane glycoprotein that serves as a receptor for plasma coagulation factor VIIa. The complex
 COMMENT
               initiates the extrinsic coagulation pathway.
             Expression of tissue factor can be induced in a variety of tissues by certain growth factors and inflammatory stimuli.
 COMMENT
                    #superfamily tissue factor
blood coagulation; glycoprotein; membrane protein
 CLASSIFICATION
 KEYWORDS
 FEATURE
                         #domain signal sequence #status predicted #label SIG
#protein tissue factor #status predicted #label MAT
#domain extracellular #status predicted #label EXT
    1-29
    30-294
    30-251
    252-274
                         #domain transmembrane #status predicted #label TMM
    75-83,218-241
                         #disulfide bonds #status predicted #binding_site carbohydrate (Asn) (covalent) #status
    37,57,169,200
                            predicted
    275
                          #binding_site fatty acid (Cys) (covalent) #status
                            experimental
                    #length 294 #molecular-weight 32923 #checksum 9197
 SUMMARY
 SEQUENCE
                                                       219
                                                            Significance =
                              Optimized Score =
Initial Score
Residue Identity =
                        52%
                              Matches
                                                       158
                                                            Mismatches
                                                                               114
                              Conservative Substitutions
Gaps
                         13
                                   30
                                                                     60
    METPAWPRVPRPETAVARTLLLGWVFA@VAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVN@VYTV@IST
                 -AALAPT-FLGCLLLQVTÄGÄGIPEK--ÄFNLTWISTDFKTILEWQPKPTNYTYTVQISD
                             20
                                        30
                                                      40
                                                                 50
                                                                            60
    80 70 100 110 120 130 KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYP-AGNVESTGS----AGEPLYENSPEFTPYLET
    70
                                       100
                                                  110
                                                             120
                                                                        130
    NLGOPTIOSFEOVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYMKSSSSGKKTAKTNTNEFLID
    NLGOPVIOOFEODGRKLNVVVKDSLTLVRKNGTFLTLROVFGKDLGYIITVRKGSSTGKKTNITNTNEFSID
   140
              150
                         160
                                     170
                                                180
                                                           190
                                                                      200
                                                                                  210
    VDKGENYCFSV0AVIPSRTVNRKSTDSPVECMG0EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGV
    VEEGVSYCFFVQAMIFSRKTNONSPGSSTVCTEGWKSFLGETLIIVGAVVLLATIFIILLSISLCKRRKNRA
            220
                                  240
                                             250
    GOSWKENSPLNVS
    ĠĠĸĠĸĸĸŤPSRLA
           290
8. FURM-969863-FIG2.PEP (1-295)
                 fusion glycoprotein - Newcastle disease virus (str
   VGNZU1
 ENTRY
                                #tupe complete
                    fusion glycoprotein - Newcastle disease virus (strain Ulster)
 TITLE
                    ORGANISM
 DATE
                    30-Jun-1993
A29823
 ACCESSIONS
                    A92799
 REFERENCE
                    Millar, N.S.; Chambers, P.; Emmerson, P.T.
    #authors
```

```
IOSFEGVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
    19SFEGVGTKLNVTVODARTLVRRNGTFLSLRAVFGKDLNYTLYVMRASSTGKKTATTNTNEFLIDVDKGEN
         150
                                                             200
                   160
                              170
                                        180
                                                   190
    220 230 240 250 260 270 280 YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
    YCFSV@AVIPSRKRK@RSPESLTECTSRE@GRAREMFFIIGAVV-VVALLIIVLSVTVYKCRKARAGPSGKE
       550
                 230
                            240
                                      250
                                                  260
                                                            270
   290
    NSPLNVS
    SSPLNIA
      290 X
6. FURM-969863-FIG2.PEP (1-295)
   S23681
                tissue factor - rabbit
ENTRY
                  S23681
                              #type complete
                  tissue factor - rabbit
 TITLE
                  #formal name Oryctolagus cuniculus #common_name domestic rabbit
ORGANISM
                  22-Nov-1993; #sequence_revision 22-Nov-1993; #text_change
DATE
                    22-Nov-1993
ACCESSIONS
                  523681
                  523681
REFERENCE
    #authors
                  Pawashe, A.; Ezekowitz, M.; Lin, T.C.; Horton, R.; Bach, R.;
                    Konigsberg, W.
    #journal
                  Thromb. Haemost. (1991) 66:315-320
    #title
                  Molecular cloning, characterization and expression of cDNA
    for rabbit brain tissue factor. #cross-references MUID:92081032
                  523681
    #accession
                       preliminary
1-260 ##label PAW
       ##status
       ##residues
       ##cross-references EMBL:X53521
SUMMARY
                  #length 260 #molecular-weight 29312 #checksum 2601
SEQUENCE
Initial Score
                      209
                           Optimized Score =
                                                   229
                                                        Significance = 5.88
                                                   186
Residue Identity =
                       71%
                           Matches
                                                        Mismatches
Gaps
                           Conservative Substitutions
    METPAWPRVPRPETAVARTLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
                                       ADTTGRAYNLTWKSTNFKTILEWEPKSIDHOYTVOIST
                                               10
                                                          20
                              100
                                        110
                                                             130
                                                   120
    KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
    RLENWKSKCFLTAETECDLTDEVVKDVGGTYMARVLSYPARNGNTTGFPEEPPFRNSPEFTPYLDTNLGGPT
    40
              50
                        60
                                   70
                                              80
                                                        90
                                                                  100
                                                                            110
                            170
                                                 190
                                      180
                                                           200
    10SFE0VGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDL1YTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
    120
                     130
                                140
                                          150
                                                                          180
                                               540
    YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
    YCFSV@AVIPSRKRK@RSPESLTECTSREGGRAREMFFIIGAVV-VVALLIIVLSVTVYKCRKARAGPSGKE
                                                    230
         190
                   200
                              210
                                        220
                                                               240
   290
    NSPLNVS
    IIII::
SSPLNIA
        260
7. FURM-969863-FIG2.PEP (1-295)
   KFMS3
                tissue factor precursor - mouse
ENTRY
                              #type complete
                  KFMS3
                  tissue factor precursor - mouse
 TITLE
ALTERNATE_NAMES
                  coagulation factor III
                  #formal_name Mus musculus #common_name house mouse 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change
ORGANISM
DATE
                    30-Sep-1993
ACCESSIONS
                  A32318; A39046
```

```
100
        KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGGPT
       RLGNWKNKCFYTTNTECDVTDEIVKNYRETYLARVLSYPA---DTSSSTVEPPFTNSPEFTPYLETNLGOPT
                                        90
                                                          100
                    80
                                                                               110
                                                                                                         120
                                                                                                                              130
                                                                           180
        IOSFEOVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
        I JULI I 
                                                            170
                                                                                                                          200
                    150
                                        160
                                                                                 180
                                                                                                     190
                                                  240
                                                                       250
                                                                                           260
        YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
        YCFHV@AVILSRRVN@KSPESPIKCTSHEKVLSTELFFIIGTVMLVIIIFIVVLSVSLHKCRKVRAERSGKE
                                                         240
                                                                             250
                                                                                                 260
                220
                                                                                                                     270
      290
        NSPLNVS
        I III :
            290 X
5. FURM-969863-FIG2.PEP (1-295)
      KFRB3
                                tissue factor precursor - rabbit
 ENTRY
                                    KFRB3
                                                          #type complete
                                    tissue factor precursor coagulation factor III
                                                                                      - rabbit
  ALTERNATE NAMES
 ORGANISM
                                    #formal_name Oryctolagus cuniculus #common_name domestic
                                    30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 30-Sep-1993
 DATE
                                    JU0441
  ACCESSIONS
 REFERENCE
                                    JU0441
                                    Andrews, B.S.; Rehemtulla, A.; Fowler, B.J.; Edgington, T.S.;
        #authors
                                        Mackman, N.
                                    Gene (1991) 98:265-269
        # journal
       #title
                                    Conservation of tissue factor primary sequence among three
                                        mammalian species.
        #cross-references MUID:91200676
        #contents
                                    brain
                                    JU0441
        #accession
              ##molecule_type mRNA
              ##residues
                                              1-292 ##label AND
              ##cross-references GB:M55390
                        Tissue factor is an integral membrane glycoprotein that serves as a receptor for plasma coagulation factor VIIa. The complex
 COMMENT
                            initiates the extrinsic coagulation pathway.
                        Expression of tissue factor can be induced in a variety of tissues by certain growth factors and inflammatory stimuli.

ION #superfamily tissue factor blood coagulation; glycoprotein; membrane protein
 COMMENT
  CLASSIFICATION
 KEYWORDS
 FEATURE
       1-32
                                              #domain signal sequence #label SIG
#protein tissue factor #label MAT
        33-292
33-249
                                              #domain extracellular #status predicted #label EXT
#domain transmembrane #status predicted #label TMM
        250-271
        272-292
                                               #domain intracellular #status predicted #label INT
        79-87,216-239
                                              #disulfide_bonds #status predicted
        41,114,154,167,
        182
                                               #binding_site carbohydrate (Asn) (covalent) #status
                                                  predicted
        274
                                               #binding site fatty acid (Cus) (covalent) #status
                                                  experimental
 SUMMARY
                                    #length 292 #molecular-weight 32738 #checksum 1871
 SEQUENCE
Initial Score
                                            209 Optimized Score =
                                                                                                    254
                                                                                                             Significance =
Residue Identity =
                                            69%
                                                      Matches
                                                                                                    506
                                                                                                              Mismatches
                                                                                                                                                  67
                                                      Conservative Substitutions
Gaps
        METPAWPRVPRPETAVARTLLLGWVFA@VAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVN@VYTV@IST
        MAPPTRLOVPRPGTAVPYTVLLGWLLAGVARAADTTGR--AYNLTWKSTNFKTILEWEPKSIDHVYTVOIST
                                                                 30
                        10
                                            20
                                                                                         40
                                                                                                              50
                                                                                                                                  60
       KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
        RLENWKSKCFLTAETECDLTDEVVKDVGGTVMARVLSYPARNGNTTGFPEEPPFRNSPEFTPYLDTNLGGPT
                                            90
                                                               100
                                                                                                       120
                                                                                   110
                                                                                                                            130
```

```
295 Mismatches
Residue Identity =
                                                      O Conservative Substitutions
         METPAWPRVPRPETAVARTLLLGWVFAGVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNGVYTVGIST
         #ETPAWPRVPRPETAVARTICLIGHVFAGVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNGVYTV@IST
                          10
                                                 50
                                                                        30
                                                                                               40
         KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
         NITT NEW TOUR PROPERTY OF THE STATE OF THE S
                                                                                                                                                            140
                                                                 100
                                                                                        110
                                                                                                               120
                                                                                                                                     130
         IOSFEGVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
         10sfe0vGtkvnvtvedertlvrrnntflslrdvfgkblivtlyvmkssssgkktaktntneflidvdkgen
                                                                                                          190
                                                                                                                                                        210
               150
                                     160
                                                            170
                                                                                   180
                                                                                                                                 200
         220 230 240 250 260 270 280 YCFSVQAVIPSRTVNRKSTDSPVECMGQEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVGQSWKE
         YCFSVOAVIPSRTVNRKSTDSPVECMGOEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVGOSWKE
                                                                              250
                                                                                                     260
      290
        NSPLNVS
         ||||||
|NSPLNVS
      290
4. FURM-969863-FIG2.PEP (1-295)
                                   tissue factor precursor - bovine
                                                                 #type complete
  TITLE
                                        tissue factor precursor - bovine
  ALTERNATE_NAMES
                                       coagulation factor III
                                       #formal name Bos primigenius taurus #common name cattle
30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change
30-Sep-1993
  ORGANISM
  DATE
                                        J@1319
  ACCESSIONS
  REFERENCE
                                        J@1319
                                       Takayenoki, Y.; Muta, T.; Miyata, T.; Iwanaga, S.
Biochem. Biophys. Res. Commun. (1991) 181:1145-1150
cDNA and amino acid sequences of bovine tissue factor.
         #authors
        #journal
         #title
         #cross-references MUID:92109720
                                        Adrenal gland
         #contents
         #accession
                                        J@1319
               ##molecule_type mRNA
                                                 1-292 ##label TAK
                ##residues
               ##cross-references GB:S74147
                          part of this sequence, including the amino end of the mature protein, was confirmed by protein sequencing Tissue factor is an integral membrane glycoprotein that serves as a receptor for plasma coagulation factor VIIa. The complex
               ##note
  COMMENT
                          initiates the extrinsic coagulation pathway.
Expression of tissue factor can be induced in a variety of tissues
by certain growth factors and inflammatory stimuli.
  COMMENT
  CLASSIFICATION
                                       #superfamily tissue factor
  KEYWORDS
                                        blood coagulation; glycoprotein; membrane protein
  FEATURE
         1-35
                                                    #domain signal sequence #label SIG
                                                    #protein tissue factor #status experimental #label MAT
#domain extracellular #status predicted #label EXT
         36-292
        36-248
                                                   #domain transmembrane #status predicted #label TMM #domain intracellular #status predicted #label INT #disulfide bonds #status predicted #label INT #bisulfide bonds #status predicted #binding site carbohydrate (Asn) (covalent) #status
        249-271
         272-292
         81-89,215-238
         43,153,181
                                                        predicted
         118,124
                                                    #binding_site carbohydrate (Thr) (covalent) #status
                                                        predicted
         274
                                                    #binding_site fatty acid (Cys) (covalent) #status
                                        experimental #length 292 #molecular-weight 32475 #checksum 1836
  SUMMARY
  SEQUENCE
                                                          Optimized Score =
Initial Score
                                                                                                                          Significance = 6.92
                                                 69% Matches
                                                                                                               204 Mismatches
Residue Identity =
                                                      3 Conservative Substitutions
Gaps
         X 10 20 30 40 50 60 70
METPAWPRVPRPETAVARTLLLGWVFAGVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNGVYTVGIST
         MATPNGPRVPCPGAAVARALLFGLVLIGGAGVAGTTDVVVAYNITUKSTNFKTILEWEPKPINHVYTVGISP
```

100% Matches

```
290
    NSPLNVS
    NSPLNVS
   290

    FURM-969863-FIG2.PEP (1-295)

   KFHU3
                  tissue factor precursor - human
ENTRY
                     KFHU3
                                  #type complete
 TITLE
                     tissue factor precursor - human
 ALTERNATE_NAMES
                    coagulation factor III
ORGANISM
                     #formal name Homo sapiens #common name man
                     30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 03-Feb-1994
DATE
ACCESSIONS
                     A28320; A29062; A29672; A29008
                     A94171
REFERENCE
    #authors
                     Spicer, E.K.; Horton, R.; Bloem, L.; Bach, R.; Williams, K.R.; Guha, A.; Kraus, J.; Lin, T.C.; Nemerson, Y.;
                       Konigsberg, W.H.
                     Proc. Natl. Acad. Sci. U.S.A. (1987) 84:5148-5152
Isolation of cDNA clones coding for human tissue factor:
    # iournal
    #title
                       primary structure of the protein and cDNA.
    #cross-references MUID:87260946
    #accession
                     A28320
        ##molecule_type mRNA
                          1-295 ##label SPI
        ##residues
        ##cross-references GB:J02931
REFERENCE
                     A29062
                    Morrissey, J.H.; Fakhrai, H.; Edgington, T.S.
Cell (1987) 50:129-135
    #authors
    #journal
    #title
                     Molecular cloning of the cDNA for tissue factor, the cellular
                       receptor for the initiation of the coagulation protease
                       cascade.
    #cross-references MUID:87244317
    #accession
                    A29062
        ##molecule_type mRNA
                          1-295 ##label MOR
        ##residues
        ##cross-references GB:J02931
        ##note
                          part of this sequence, including the amino end of the
                             mature protein, was confirmed by protein sequencing
REFERENCE
                    Scarpati, E.M.; Wen, D.; Broze Jr., G.J.; Miletich, J.P.; Flandermeyer, R.R.; Siegel, N.R.; Sadler, J.E. Biochemistry (1987) 26:5234-5238
    #authors
    # journal
                     Human tissue factor: cDNA sequence and chromosome
    #Litle
                       localization of the gene.
    #cross-references MUID:88050796
    #accession
                    A29672
        ##molecule_type mRNA
                          1-259,'A',261-295 ##label SCA
        ##residues
        ##cross-references GB:M16553
REFERENCE
                     A37422
                    Bach, R.; Konigsberg, W.H.; Nemerson, Y.
Biochemistry (1988) 27:4227-4231
    #authors
    #journal
    #title
                     Human tissue factor contains thioester-linked palmitate and
                     stearate on the cytoplasmic half-cystine.
annotation; disulfide bonds and fatty acid binding site
    #contents
COMMENT
              Tissue factor is an integral membrane glycoprotein that serves as a
                receptor for plasma coagulation factor VIIa. The complex
             initiates the extrinsic coagulation pathway. Expression of tissue factor can be induced in a variety of tissues
COMMENT
                by certain growth factors and inflammatory stimuli.
 GENETICS
                     GDB:F3
    #gene
#map position 1p22-p21
CLASSIFICATION #superfa
                    #superfamily tissue factor
KEYWORDS
                     blood coagulation; glycoprotein; lipoprotein; membrane
                       protein
 FEATURE
    1-32
                           #domain signal sequence #status experimental #label SIG
                          #protein tissue factor #status experimental #label MAT
    33-295
                           #domain extracellular #status predicted #label EX
    33-251
    252-274
275-295
                          #domain transmembrane #status predicted #label TMM
#domain intracellular #status predicted #label INT
    81-89,218-241
                          #disulfide bonds #status experimental
                          #binding_site carbohydrate (Asn) (covalent) #status
                             experimental
    156,169
                           #binding_site carbohydrate (Asn) (covalent) #status
                             predicted
    277
                          #binding_site_fatty acid (Cys) (covalent) #status
                             experimental
                     #length 295 #molecular-weight 33067 #checksum 4014
 SUMMARY
 SEQUENCE
                         295 Ontimized Score =
Initial Score
                                                         295 Significance = 8.33
```

```
SEQUENCE
Initial Score
                        295 Optimized Score =
                                                       295 Significance = 8.33
Residue Identity =
                        100% Matches
                                                        295 Mismatches
                              Conservative Substitutions
                                                                                   0
Gaps
    METPAWPRVPRPETAVARTLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
             10
                         20
                                    30
                                                40
                                                                       60
    80 90 100 110 120 130 140 KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
    ksgdwkskcfyttdtecdltdelvkdvkgtylarvfsypagnvestgsageplyenspeftpyletnlggpt
                      90
                                 100
                                            110
                                                        120
                                                                   130
                                          180
    10SFE0VGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDL1YTLYYWKSSSSGKKTAKTNTNEFL1DVDKGEN
    I OSFEGVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIVTLVYWKSSSSGKKTAKTNTNEFLIDVDKGEN
                                                     190
                                                                            210
        150
                   160
                              170
                                          180
                                                                 200
    220 230 240 250 260 270 280 YCFSVQAVIPSRTVNRKSTDSPVECMGQEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVGQSWKE
    YCFSVGAVIPSRTVNRKSTDSPVECMGGEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVGGSHKE
     220
                                       250
   290
    NSPLNVS
    |||||||
|NSPLNVS
   290
2. FURM-969863-FIG2.PEP (1-295)
   A43645
                  tissue factor - human
                    A43645 #type complete tissue factor - human #formal name Homo sapiens #common_name man 03-Nar-1993 #sequence_revision 03-Nar-1993 #text_change
 ENTRY
 TITLE
 ORGANISM
 DATE
                    30-Sep-1993
A43645
 ACCESSIONS
 REFERENCE
                    A43645
                    Mackman, N.; Morrissey, J.H.; Fowler, B.; Edgington, T.S.
Biochemistry (1989) 28:1755-1762
    #authors
     #journal
                    Complete sequence of the human tissue factor gene, a highly regulated cellular receptor that initiates the coagulation
    #title
                       protease cascade.
    #accession
                    A43645
        ##status
                          preliminary
        ##molecule_type DNA
                        1-295 ##label MAC
        ##residues
        ##cross-references GB:J02844; GB:J02846
 SUMMARY
                    #length 295 #molecular-weight 33067 #checksum 4014
 SEQUENCE
                         295
                                                        295
                             Optimized Score =
                                                            Significance = 8.33
Initial Score
                                                        295 Mišmatches
Residue Identity =
                        100%
                              Matches
Gaps
                              Conservative Substitutions
                                    30
    METPAWPRVPRPETAVARTILLGWVFA@VAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVN@VYTV@IST
    METPAWPRVPRPETAVARTLLLGWVFAGVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNGVYTVGIST
             10
                         20
                                    30
                                               40
                                                           50
    KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGGPT
    .
KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGGPT
           80
                      90
                                 100
                                            110
                                                        120
                                                                   130
                                                                               140
                                                     190
                                          180
    I ØSFE ØVGTKVNVTVE DERTL VRRNNTFLSLRDVFGKDL I YTL YYMKSSSSGKKTAKTNTNEFL I DVDKGEN
    I OSFEOVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIVTLYVWKSSSSGKKTAKTNTNEFLIDVDKGEN
                                          180
        150
                   160
                                                     190
                               170
                                                                 200
                                                                            210
    YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
    YCFSVGAVIPSRTVNRKSTDSPVECMGGEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVGGSWKE
```

#length 295 #molecular-weight 33067 #checksum 4014

SUMMARY

Mean Scores: Median Standard Deviation 71 26.89 126

CPU Times: 00:01:53.98 Total Elapsed 00:05:47.00

Number of residues: Number of sequences optimized:

1682879 4259

The scores below are sorted by optimized score. Significance is calculated based on optimized score.

3 100% identical sequences to the query sequence were found:

Sequence Name	Description	Length	Init. Score	Opt. Score	Sig. F	rame
1. A47574 2. A43645 3. KFHU3	tissue factor precursor - hu tissue factor - human tissue factor precursor - hu	295	295	295 295 295	8.33 8.33 8.33	0

The list of other best scores is:

Sequence Name	Description	Length	Init. Score		Sig.	Frame
4. KFB03 5. KFRB3	**** 6 standard deviatio tissue factor precursor - tissue factor precursor - **** 5 standard deviatio	bov 292 rab 292	148 209	257 254	6.92 6.80	
6. S23681 7. KFMS3	tissue factor - rabbit tissue factor precursor -		209 87	229 219	5.88 5.50	
8. VGNZU1 9. A46329 10. B46329 11. C46329 12. VGBEX1 13. A36830 14. D46329 15. VGNZTE 16. H46329 17. S07422 18. F46329 19. VGNZGB 20. A30588 21. JQ0090 22. VGNZNV 23. S06345 24. E46329 25. G46329 26. B36830 27. VGNZND 28. I46329 29. XDEC 30. A42632 31. A32800 33. A34173 34. A41931	**** 3 standard deviation fusion glycoprotein - Newc fusion glycoprotein precur fusion glycoprotein precur fusion glycoprotein precur glycoprotein X precursor - fusion glycoprotein precur fusion glycoprotein - Newc 140K adhesin protein MgPa - fusion glycoprotein precur fusion glycoprotein p	ns above metast 553 sor 553 so	ean *** 777777777777777777777777777777777	157 157 157 157 156 156 156 155 155 155 155 155 155 155	3.20 3.20 3.16 3.16 3.16 3.16 3.11 3.11 3.11 3.11	000000000000000000000000000000000000000
35. HHMS60 36. A29646 37. S13089 38. GRMSP1 39. S18449 40. S20548	heat shock protein 60 prec invasin - Yersinia pseudot heat shock protein 60 prec microtubule-associated pro variant surface glycoprote leptomycin B resistance pr	ube 986 urs 573 tei 2464 in 514	9 7 9 7 8 7	153 153 153 152 152 152	3.05 3.05 3.01 3.01 3.01	000

```
1. FURM-969863-FIG2.PEP (1-295)
```

tissue factor precursor - human A47574

A47574 #type complete
tissue factor precursor - human
#formal name Homo sapiens #common name man
31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change
31-Dec-1993
A47574
Fisher-**ENTRY** TITLE ORGANISM DATE **ACCESSIONS** REFERENCE #authors Fisher, K.L.; Gorman, C.M.; Vehar, G.A.; O'Brien, D.P.; Lawn, R.M. Thromb. Res. (1987) 48:89-99 Cloning and expression of human tissue factor cDNA. A47574 #journal #title #accession

##status preliminary

##molecule_type mRNA ##residues 1-295 ##label FIS Adrenss-rafa enres CR:M2747A

145 148 2.43

Times: CPU

00:01:33.96

Total Elapsed 00:03:13.00

Number of residues: 1520603 Number of sequences optimized: 3760

The scores below are sorted by optimized score. Significance is calculated based on optimized score.

A 100% identical sequence to the query sequence was found:

Sequence Name	Description		Length	Score	-	
1. TF HUMAN	TISSUE FACTOR PRECURSOR	-	295	 295		

The list of other best scores is:

Sequence Name	Description	Init. O Length Score S	pt. core	Sig. F	rame
2. TF_BOVIN	**** 46 standard deviations TISSUE FACTOR PRECURSOR (TF)	292 148	257	46.15	0
3. TF_RABIT	**** 44 standard deviations TISSUE FACTOR PRECURSOR (TF) *** 30 standard deviations	292 209	254	44.91	0
4. TF_MOUSE	TISSUE FACTOR PRECURSOR (TF)	294 87	219	30.49	0
5. VGLF_NDVQ 6. VGLF_NDVU 7. BRAZ_PSEAE	FUSION GLYCOPROTEIN PRECURSO FUSION GLYCOPROTEIN PRECURSO BRANCHED CHAIN AMINO ACID TR	R 553 7 R 553 7 A 437 6	157 157 156	4.94 4.94 4.53	0
8. VGLF_NDVH4 9. VGLF_NDVA 10. VGLF_NDVT	FUSION GLYCOPROTEIN PRECURSO FUSION GLYCOPROTEIN PRECURSO FUSION GLYCOPROTEIN PRECURSO	R 553 7 R 553 7	156 156 156	4.53 4.53 4.53	0
11. VGLF_NDVH3 12. VGLX_HSVEB 13. ADP1_MYCGE	FUSION GLYCOPROTEIN PRECURSOR GLYCOPROTEIN X PRECURSOR. 140 KD ADHESIN PRECURSOR (AT	797 8 T 1444 7	156 156 155	4.53 4.53 4.12	00000
14. DCT1 HUMAN 15. VGLF NDVB 16. VGLF NDVTG 17. VGLF NDVM	OCTAMER-BINDING TRANSCRIPTION FUSION GLYCOPROTEIN PRECURSON FUSION GLYCOPROTEIN PRECURSON FUSION GLYCOPROTEIN PRECURSON	R 553 7	155 155 155 155	4.12 4.12 4.12 4.12	0
18. VGLF_NDVL	FUSION GLYCOPROTEIN PRECURSO **** 3 standard deviations	R 553 7	155	4.12	ŏ
19. VGLF_NDVI 20. CYAA_BORPE 21. ASG2_ECOLI 22. I230_MOUSE	FUSION GLYCOPROTEIN PRECURSO CALMODULIN-SENSITIVE ADENYLA L-ASPARAGINASE II PRECURSOR INDOLEAMINE 2,3-DIOXYGENASE	R 553 7 T 1706 7 (348 6	154 154 154 153	3.71 3.71 3.71 3.30	0000
23. P60 RUMAN 24. P60 RAT 25. P60 CRIGR	MITOCHONDRIAL MATRIX PROTEIN MITOCHONDRIAL MATRIX PROTEIN MITOCHONDRIAL MATRIX PROTEIN	(407 6 573 8 573 9 573 9	153 153 153	3.30 3.30 3.30 3.30	00000
26. A4 DROME 27. P60 MOUSE 28. INVA_YERPS	BETA-AMYLOID-LIKE PROTEIN PR MITOCHONDRIAL MATRIX PROTEIN INVASIN.	E 886 7 573 9 985 7	153 153 153	3.30 3.30 3.30	0
29. ATC1 YEAST 30. FTSZ BACSU 31. SYFB BACSU 32. MAPB MOUSE 33. PEC1 HUMAN	**** 2 standard deviations CALCIUM-TRANSPORTING ATPASE CELL DIVISION FTSZ PROTEIN. PHENYLALANYL-TRNA SYNTHETASE MICROTUBULE-ASSOCIATED PROTE PLATELET ENDOTHELIAL CELL AD	1 950 7 382 7 804 7 I 2464 7	152 152 152 152 152	2.88 2.88 2.88 2.88 2.88	0000
34. AROA KLEPN 35. VSI4 TRYBB 36. CH60 BACSU 37. CH60 THEP3 38. MOT1 YEAST	3-PHOSPHOSHIKIMATE 1-CARBOXY VARIANT SURFACE GLYCOPROTEIN 60 KD CHAPERONIN (PROTEIN CP 60 KD CHAPERONIN (HEAT SHOCK PROBABLE HELICASE MOT1.	V 427 6 514 8 N 544 7 538 7	152 152 151 151 151	2.88 2.88 2.47 2.47 2.47	00000
39. FLIF BACSU 40. ICEN PSESY	FLAGELLAR M-RING PROTEIN (FL ICE NUCLEATION PROTEIN.		151 151	2.47 2.47	0

```
1. FURM-969863-FIG2.PEP (1-295)
TF_HUMAN TISSUE FACTOR PRECURSOR (TF) (COAGULATION FACTOR I
```

```
ID TF HUMAN STANDARD; PRT; 295 AA.
AC P13726;
DT 01-JAN-1990 (REL. 13, CREATED)
DT 01-JAN-1990 (REL. 13, LAST SEQUENCE UPDATE)
DT 01-FEB-1994 (REL. 28, LAST ANNOTATION UPDATE)
DE TISSUE FACTOR PRECURSOR (TF) (COAGULATION FACTOR III).
GN F3.
OS HOMO SAPIENS (HUMAN).
OC EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
OC EUTHERIA; PRIMATES.
RN [1]
RP SEQUENCE FROM N.A.
RM 89247359
```

. MORRISSEY .L H . FOULER R . EDGINGTON T S :

```
BIOCHEMISTRY 28:1755-1762(1989).
 RN
        [2]
 RP
        SEQUENCE FROM N.A.
 RM
        87260946
        SPICER E.K., HORTON R., BLOEM L., BACH R., WILLIAMS K.R., GUHA A., KRAUS J., LIN T.C., NEMERSON Y., KONIGSBERG W.H.; PROC. NATL. ACAD. SCI. U.S.A. 84:5148-5152(1987).
 RA
 RA
 RL
 RN
 RP
        SEQUENCE FROM N.A.
 RM
        87244317
        MORRISSEY J.H., FAKHRAI H., EDGINGTON T.S.;
 RA
        CELL 50:129-135(1987).
 RL
 RN
        [4]
 RP
        SEQUENCE FROM N.A.
 RM
        88050796
        SCARPATI E.M., WEN D., BROZE G.J. JR., MILETICH J.P., FLANDERMEYER R.R., SIEGEL N.R., SADLER J.E.; BIOCHEMISTRY 26:5234-5238(1987).
 RA
 RA
 RL
 RN
        [5]
 RP
        DISULFIDE BONDS, AND PALMITOYLATION.
        89000604
 RM
        BACH R., KONIGSBERG W.H., NEMERSON Y.;
BIOCHEMISTRY 27:4227-4231(1988).
-!- FUNCTION: INITIATES BLOOD COAGULATION BY FORMING A COMPLEX WITH
 RA
 RL
 CIRCULATING FACTOR VII OR VIIA. THE ITF:VIIA) COMPLEX ACTIVATES FACTORS IX OR X BY SPECIFIC LIMITED PROTOLYSIS. TF PLAYS A ROLE IN NORMAL HEMOSTASIS BY INITIATING THE CELL-SURFACE ASSEMBLY AND PROPAGATION OF THE COAGULATION PROTEASE CASCADE.
        -!- SUBCELLULAR LOCATION: TYPE I MEMBRANE PROTEIN.
-!- INDUCTION: TF EXPRESSION IS HIGHLY DEPENDENT UPON CELL TYPE. TF
CAN ALSO BE INDUCED BY THE INFLAMMATORY MEDIATORS INTERLEUNIN 1
              AND TNF, AS WELL AS BY ENDOTOXIN, TO APPEAR ON MONOCYTES AND VASCULAR ENDOTHELIAL CELLS AS A COMPONENT OF CELLULAR IMMUNE
 CC
              RESPONSE.
        EMBL; J02931; HSTFP.
EMBL; M16553; HSTFI.
EMBL; J02846; HSTFPB.
 DR
 DR
 DR
        PIR; A28320; KFHU3.
 DR
        PIR; A43645; A43645.
MIM; 134390; TENTH EDITION.
PROSITE; PS00621; TISSUE_FACTOR.
 DR
 DR
 DR
        GLYCOPROTEIN; BLOOD COAGULATION; TRANSMEMBRANE; SIGNAL; LIPOPROTEIN.
 KW
 FT
        SIGNAL
                                    32
                                   295
 FT
        CHAIN
                          33
                                                 TISSUE FACTOR.
 FT
FT
FT
                          33
                                   251
                                                 EXTRACELLULAR (POTENTIAL).
        DOMAIN
                         252
275
        TRANSMEM
                                   274
                                                 POTENTIAL.
                                   295
                                                 CYTOPLASMIC (POTENTIAL).
        DOMAIN
 FŤ
                          46
                                    48
        SITE
                                                 WKS MOTIF.
 FT
        SITE
                          77
                                    79
                                                 WKS MOTIF.
 FT
FT
                         190
        SITE
                                   192
                                                 WKS MOTIF.
        CARBOHYD
                         156
                                   156
                                                 POTENTIAL.
 FT
                                   169
        CARBOHYD
                         169
                                                 POTENTIAL.
 FT
        DISULFID
                          81
                                    89
 FT
        DISULFID
                         218
                                   241
                         277
 FT
        LIPID
                                   277
                                                PALMITATE.
 FT
        CONFLICT
                                                V -> A (IN REF. 4).
                         260
                                   260
 50
        SEQUENCE
                       295 AA;
                                   33067 MW; 494480 CN;
Initial Score
                              295
                                     Optimized Score =
                                                                    295
                                                                           Significance = 61.80
Residue Identity =
                                                                    295
                             100%
                                     Matches
                                                                           Mišmatches
Gaps
                                     Conservative Substitutions
     METPAWPRVPRPETAVARTLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
     HETPAWPRVPRPETAVARTLLLGWVFAGVAGASGTTNTVAAVNLTWKSTNFKTILEWEPKPVNGVYTVGIST
                10
                              20
                                            30
                                                           40
                                                                        50
                                                                                      60
                                        100
                                                      110
                                                                    120
                                                                                  130
     KSGDWKSKCFYTTDTECDLTDEIVKDVKGTYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
     KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
              80
                            90
                                        100
                                                      110
                                                                    120
                                                                                  130
                                                                                                140
                                                                 190
                                                                                200
                                                   180
                                     170
     I OSFEQVGTKVNVT VEDERTL VRRNNTFLSL RDVFGKDL I YTL YYWKSSSSGKKTAKTNTNEFL I DVDKGEN
     10sfeqvgtkvnvtvedertlvrrnntflslrdvfgkdlivtlyvmkssssgkktaktnineflidvdkgen
          150
                       160
                                     170
                                                   180
                                                                 190
                                                                               200
                                                                                              210
                                                 250
                                                               260
                                                                             270
     YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
     ĮĮĮĮ
yčrsvėkvipsktvnkksidspyečaggekgerkeiryligkvyrvylilviilaislakčkkagygesuke
       220
                     230
                                   240
                                                 250
                                                               260
                                                                             270
                                                                                           280
```

290 X

```
290
```

DT

```
2. FURM-969863-FIG2.PEP (1-295)
                   TISSUE FACTOR PRECURSOR (TF) (COAGULATION FACTOR I
    TF BOVIN
 ID
                                             PRT;
       TF BOVIN
                          STANDARD;
                                                      292 AA.
       P30931;
       01-JUL-1993 (REL. 26, CREATED)
 DT
       01-JUL-1993 (REL. 26, LAST SEQUENCE UPDATE)
01-FEB-1994 (REL. 28, LAST ANNOTATION UPDATE)
TISSUE FACTOR PRECURSOR (TF) (COAGULATION FACTOR III).
 DT
 DT
 DE
       BOS TAURUS (BOVINE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 05
 OC
 OC
       EUTHERIA; ARTIODACTYLA.
 RN
 RP
       SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
 RC
        TISSUE=ADRENAL GLAND;
 RM
       92109720
       TAKAYENOKI Y., MUTA T., MIYATA T., IWANAGA S.;
BIOCHEM. BIOPHYS. RES. COMMUN. 181:1145-1150(1991).
-!- FUNCTION: INITIATES BLOOD COAGULATION BY FORMING A COMPLEX WITH
CIRCULATING FACTOR VII OR VIIA. THE [TF:VIIA] COMPLEX ACTIVATES
FACTORS IX OR X BY SPECIFIC LIMITED PROTOLYSIS. TF PLAYS A ROLE IN
NORMAL HEMOSTASIS BY INITIATING THE CELL-SURFACE ASSEMBLY AND
PROPAGATION OF THE COAGULATION PROTESSE CASCADE.
 RA
 RL
 CC
CC
CC
CC
       -!- SUBCELLULAR LOCATION: TYPE I MEMBRANE PROTEIN.
EMBL; S74147; S74147.
PIR; J01319; KFB03.
 ČČ
 DR
 DR
       GLYCOPROTEIN; BLOOD COAGULATION; TRANSMEMBRANE; SIGNAL; LIPOPROTEIN.
 KW
FT
FT
FT
FT
FT
FT
FT
       SIGNAL
                                 35
       CHAIN
                               292
                                            TISSUE FACTOR.
                        36
                                            EXTRACELLULAR (POTENTIAL).
       DOMAIN
                               248
                      249
272
       TRANSMEM
                               271
                                            POTENTIAL
                                            CYTOPLASHIC (POTENTIAL).
       DOMAIN
                               292
       SITE
                        46
                                 48
                                            WKS MOTIF.
                        43
                                            POTENTIAL.
       CARBOHYD
                                 43
        CARBOHYD
                       153
                                            POTENTIAL.
                                153
                      181
81
215
 FT
       CARBOHYD
                               181
                                            POTENTIAL.
 FŤ
                               89
238
                                            BY SIMILARITY.
BY SIMILARITY.
       DISULFID
 FT
       DISULFID
       LIPID
                      274
                                            PALMITATE (BY SIMILARITY).
 FT
                               274
                                32475 MW; 478152 CN;
       SEQUENCE
                     292 AA;
                           148 Optimized Score = 49% Matches =
                                                              257 Significance = 46.15
Initial Score
                           69% Matches = 204
3 Conservative Substitutions
                                                              204 Mismatches =
Residue Identity =
Gaps
     METPAWPRVPRPETAVARTLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
     MATPNGPRYPCPQAAVARALLFGLVLIQGAGVAGTTDVVVAYNITUKSTNFKTILEWEPKPINHVYTVQISP
                                         30
               10
                            20
                                                     40
                                     100
                                                              120
     KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
     80
                                     100
                                                  110
                                                                  120
                                                                               130
     IGSFEGVGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGEN
     100 160 170 180 190 200 210
                                            250
                                240
                                                         590
     YČFSVQAVIPSRTVNRKSTDSPVECMGQEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVGQSWKE
     YCFHVQAVILSRRVNGKSPESPIKCTSHEKVLSTELFFILGTVMLVIIIFIVVLSVSLHKCRKVRAERSGKE
          550
                       230
                                   240
                                                250
                                                             260
     NSPLNVS
     I III :
       290 X
3. FURM-969863-FIG2.PEP (1-295)
                   TISSUE FACTOR PRECURSOR (TF) (COAGULATION FACTOR I
    TF RABIT
 ID
        TF RABIT
                          STANDARD;
                                             PRT;
                                                      292 AA.
       P24055;
       01-MAR-1992 (REL. 21, CREATED)
01-MAR-1992 (REL. 21, LAST SEQUENCE UPDATE)
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DT
       01-FEB-1994 (REL. 28, LAST ANNOTATION UPDATE)
       TISSUE FACTOR PRECURSOR (TF) (COAGULATION FACTOR 111).
DRYCTOLAGUS CUNICULUS (RABBIT).
 DE
 OS
       EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OC
 OC
       EUTHERIA; LAGOMORPHA.
 RN
 RP
       SEQUENCE FROM N.A.
 RC
       TISSUE=HEART;
       91200676
 RM
 RA
       ANDREWS B.S., REHEMTULLA A., FOWLER B.J., EDGINGTON T.S., MACKMAN N.;
 RL
       GENE 98:265-269(1991).
 RN
       [2]
 RP
       SEQUENCE FROM N.A.
       92081032
 RM
       PAWASHE A., EZEKOWITZ M., LIN T.C., HORTON R., BACH R., KONIGSBERG W.; THROMB. HAEMOST. 66:315-320(1991).
-!- FUNCTION: INITIATES BLOOD COAGULATION BY FORMING A COMPLEX WITH
 RA
 RL
CC
            CIRCULATING FACTOR VII OR VIIA. THE [TF:VIIA] COMPLEX ACTIVATES
       FACTORS IX OR X BY SPECIFIC LIMITED PROTOLYSIS. TF PLAYS A ROLE IN NORMAL HEMOSTASIS BY INITIATING THE CELL-SURFACE ASSEMBLY AND PROPAGATION OF THE COAGULATION PROTEASE CASCADE.
-!- TISSUE SPECIFICITY: BRAIN, HEART.
-!- SUBCELLULAR LOCATION: TYPE I MEMBRANE PROTEIN.
CCCCCCC
       EMBL; M55390; OCRTF.
DR
DR
       PIR; JU0441; KFRB3.
       PROSITE; PS00621; TISSUE FACTOR.
GLYCOPROTEIN; BLOOD COAGOLATION; TRANSMEMBRANE; SIGNAL; LIPOPROTEIN.
 DR
KW
FT
FT
FT
FT
FT
FT
FT
FT
       SIGNAL
       CHAIN
                               292
                                            TISSUE FACTOR.
EXTRACELLULAR (POTENTIAL).
                               250
       DOMAIN
       TRANSMEM
                      250
                               271
                                            POTENTIAL
                      272
                                            CYTOPLASMIC (POTENTIAL).
                               292
       DOMAIN
                                            WKS MOTIF. WKS MOTIF.
       SITE
                        44
                                46
                        75
                                77
       SITE
                                            POTENTIAL.
       CARBOHYD
                        41
                                41
       CARBOHYD
                                            POTENTIAL.
                      114
                               114
                                            POTENTIAL.
       CARBOHYD
                       154
                               154
       CARBOHYD
                       167
                               167
                                            POTENTIAL.
FT
FT
       CARBOHYD
                      182
                               182
                                            POTENTIAL.
                       79
                                            BY SIMILARITY.
BY SIMILARITY.
       DISULFID
                                87
 FT
       DISULFID
                      216
                               239
 FT
                      274
                                            PALMITATE (BY SIMILARITY).
                               274
       LIPID
 SQ
       SEQUENCE
                     292 AA;
                                32738 MW; 459706 CN;
                           209 Optimized Score =
Initial Score
                                                              254 Significance = 44.91
Residue Identity =
                           69%
                                 Matches
                                                              206
                                                                    Mismatches
                                                                                           67
                                 Conservative Substitutions
Gaps
     METPAWPRVPRPETAVARTLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
    MAPPTRLGVPRPGTAVPYTVLLGWLLAGVARAADTTGR--AYNLTWKSTNEKTILEWEPKSIDHVYTVGIST
               10
                           20
                                        30
                                                       40
                                                                    50
                                                                                 60
     KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PT
    RLENWKSKCFLTAETECDLTDEVVKDVGGTYMARVLSYPARNGNTTGFPEEPPFRNSPEFTPYLDTNLGGPT
               80
                           90
                                       100
                                                   110
                                                                120
                                                                             130
                                                                                          140
                                  170
                                              180
                                                           190
                                                                        200
     1@SFE@VGTKVNVTVEDERTLVRŘNŇTFLSLRDVFGKDLIYTLÝÝNKSSSSGKKTAKTNTNEFLIDVDKGEN
     I OSFEGVETKLNYTVODARTLYRRNGTFLSLRAVFGKDLNYTLYYWRASSTGKKTATTNINEFLIDVDKGEN
                        160
           150
                                    170
                                                 180
                                                              190
                                                                           200
      220
                   230
                               240
                                            250
                                                        590
                                                                     270
                                                                                  280
     YCFSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGVG@SWKE
     220
                     230
                                  240
                                                            260
                                                                         270
                                                                                      280
   290
    NSPLNVS
     SSPLNIA
       290 X
4. FURM-969863-FIG2.PEP (1-295)
                   TISSUE FACTOR PRECURSOR (TF) (COAGULATION FACTOR I
   TF_MOUSE
 ΙĐ
       TF MOUSE
                          STANDARD:
                                             PRT;
                                                      294 AA.
       P20352;
       01-FEB-1991 (REL. 17, CREATED)
01-AUG-1991 (REL. 19, LAST SEQUENCE UPDATE)
01-FEB-1994 (REL. 28, LAST ANNOTATION UPDATE)
TISSUE FACTOR PRECURSOR (TE) (COACULATION FACTOR III)
 DT
 DT
 NF
```

```
GN
       CF-3.
      MUS MUSCULUS (MOUSE).
EUKARYOTA; METAZOA; CHORDATA; VERTEBRATA; TETRAPODA; MAMMALIA;
 OS
 DC
       EUTHERIA; RODENTIA.
 OC
 RN
 RP
       SEQUENCE FROM N.A.
       91093171
 RM
 RA
       RANGANATHAN G., BLATTI S.P., SUBRAMANIAM M., FASS D.N., MAIHLE N.J.,
 RA
       GETZ M.J.
 RL
       J. BIOL. CHEM. 266:496-501(1991).
 RN
       SEQUENCE FROM N.A.
 ŘΡ
 RC
       STRAIN=BALB/C;
 RM
       89343974
      HARTZELL S., RYDER K., LANAHAN A., LAU L.F., NATHANS D.;
MOL. CELL. BIOL. 9:2567-2573(1989).
-!- FUNCTION: INITIATES BLOOD COAGULATION BY FORMING A COMPLEX WITH
 RA
 RL
CC
CC
CC
CC
CC
CC
           CIRCULATING FACTOR VII OR VIIA. THE [TF:VIIA] COMPLEX ACTIVATES
           FACTORS IX OR X BY SPECIFIC LIMITED PROTOLYSIS. TF PLAYS A ROLE IN NORMAL HEMOSTASIS BY INITIATING THE CELL-SURFACE ASSEMBLY AND PROPAGATION OF THE COAGULATION PROTEASE CASCADE.
       -!- SUBCELLULAR LOCATION; TYPE I MEMBRANE PROTEIN.
      EMBL; M57896; MMTFA.
EMBL; M26071; MMTF.
 DR
 DR
 DR
      PIR; A32318; KFMS3.
      PROSITE; PS00621; TISSUE FACTOR. GLYCOPROTEIN; BLOOD COAGOLATION; TRANSMEMBRANE; SIGNAL; LIPOPROTEIN.
DR
 KW
 FT
       SIGNAL
FT
FT
FT
                     29
                             294
       CHAIN
                                        TISSUE FACTOR.
                                        EXTRACELLULAR (POTENTIAL).
       DOMAIN
                     29
                             251
                    252
275
       TRANSMEM
                             274
                                        POTENTIAL
                                        CYTOPLASMIC (POTENTIAL).
                             294
      DOMAIN
FT
FT
FT
                    245
37
                            247
37
       SITE
                                        WKS MOTIF.
       CARBOHYD
                                        POTENTIAL.
       CARBOHYD
                     57
                             57
                                        POTENTIAL.
FT
FT
                    169
200
      CARBOHYD
                             169
                                        POTENTIAL.
                                        POTENTIAL.
                             200
       CARBOHYD
 FT
      DISULFID
                     75
                             83
                                        BY SIMILARITY.
                    218
275
FT
FT
                                        BY SIMILARITY.
      DISULFID
                             241
                             275
      LIPID
                                        PALMITATE (BY SIMILARITY).
 FT
       CONFLICT
                     56
                              26
                                        I -> T (IN REF. 2).
                   294 AA;
                              32935 MW; 468130 CN;
      SEQUENCE
 SQ
                                                        219 Significance = 30.49
                               Optimized Score =
Initial Score
Residue Identity
                         52%
                              Matches
                                                  =
                                                         158 Mismatches = 114
                          13
                               Conservative Substitutions
                                                                                   16
Gaps
    METPAWPRVPRPETAVARTLLLGWVFAQVAGASGTTNTVAAYNLTWKSTNFKTILEWEPKPVNQVYTVQIST
    MAILURPRLL --- AALAPT-FLCCLLLQVIAGAGIPEK-AFNLTWISTDFKTILEWQPKPTNYTYTVQISD
             10
                              20
                                                        40
                                                                   50
                                         30
                                                                               60
                                 100
                                                          120
    KSGDWKSKCFYTTDTECDLTDEIVKDVK@TYLARVFSYP-AGNVESTGS----AGEPLYENSPEFTPYLET
    RSRNWKNKCFSTTDTECDLTDEIVKDVTWAYEAKVLSVPRRNSVHGDGDGLVIHGEEPPFTNAPKFLPYRDT
                  80
                              90
                                        100
                                                    110
                                                                120
                                                                           130
                                      170
                                                  180
    NLG@PTI@SFE@VGTKVNVTVEDERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLID
    140
                          160
                                      170
                                                 180
                                                             190
              150
                                                                         200
                                                                                     210
    220 230 240 250 260 270 280 VDKGENYCFSVQAVIPSRTVNRKSTDSPVECMGQEKGEFREIFYIIGAVVFVVIILVIILAISLHKCRKAGV
    220
                        230
                                   240
                                               250
          290
    GOSHKENSPLNVS
    ĠĠĸĠĸĸĸŤPSRLA
           290
5. FURM-969863-FIG2.PEP (1-295)
   VGLF NDVQ
                 FUSION GLYCOPROTEIN PRECURSOR (CONTAINS: FUSION GL
      VGLF NDV0
P33615;
 ID
                        STANDARD;
                                         PRT;
                                                  553 AA.
 AC
 DT
       01-FEB-1994 (REL. 28, CREATED)
      01-FEB-1994 (REL. 28, LAST SEQUENCE UPDATE)
01-FEB-1994 (REL. 28, LAST ANNOTATION UPDATE)
 DT
 ĎΕ
       FUSION GLYCOPROTEIN PRECURSOR (CONTAINS: FUSION GLYCOPROTEINS F1 AND
```

```
FH FT FT FT FT FT XX
                        Location/Qualifiers
      Key
      sig_peptide
                        64..144
                        1..1683
                        /strain="Sprague-Dawley"
/organism="Rattus norvegicus"
/cell_type="aortic smooth muscle"
      CDS
                        /note="NCBI gi: 464011"
/product="tissue factor protein"
/codon_start=1
      Sequence 1683 BP; 473 A; 379 C; 379 G; 452 T; 0 other;
                        321 Optimized Score = 555
60% Matches = 600
69 Conservative Substitutions
                                                      555 Significance = 21.64
600 Mismatches = 321
Initial Score = Residue Identity =
                                   30
    CTCGCACTCCCTCTGGCCGGCCCAGGGCGCCTTCAGCCCAACCTCCCCAGGCCCCACGGGCCCACGGAACCC
                                  CTCGTGTAGCGTAGCCTCC---GCGCCTCTG--
    ccgcgAcctcGccAgcAgcccTtgGACAtGGcTATCCC--CATG----CG---CCCGCGCCTCCTAG-CGGC
    150 160 170 180 190 200 210 CGTCGCTCGGCCGCCTCCGGCTGGGTCTTCGCC--CAGGTGGCCGGCGCTTCAGGCA---CTACAAAT
    cctcacacccac-ct--trctcact--rccttcicctrcacatagaccatractagacacactcciccaaaa
   100
             110
                            120
                                        130
                                                   140
    220 230 240 250 260 270 280 ACTGTGGCAGCATATATTTAACTTGGAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCCAAACCC
    AAAG-CGTTTAATTTAACTTGGATATCAACTGATTTCAAGACAATCTTGGAGTGGCAACCGAAACCCAA
    290 300 310 320 330 340 350 GTCAATCAAGTCTACACTGTTCAAATA-AGCACTA-AGTCAGGAGATTGGAAAAGCAAATGCTTTTACACAA
    CTATACCTACACTGTTCAGATAAGCGATAGATCTAGAAACTGGA-AATACAAATGCA----CTGGAACCACA
                                      380
    CAGACACAGAGTG---TGACCTCACCGA---CGA-GATTGTGAA--GGA--TGTGAAGCA---GACGTA-CT
    GACACTGAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAACTGGACCTATGAAGCAAGGGTCCTATCT
    10 420 430 440 450 460 470 -TGGCACGGTCTCCCCACCAGGGAATGTGGAGA-GCACCGGTTCTGCTGGGGAG---CCTCTGTA
    Gtccchtegaggagct-caac---tcategalandeanaachtettttegaacteategegalegaacegccat-
                 390
                                 400
                                            410
                                                       420
                                                                  430
    480 490 500 510 520 530 540 TGAGAACTCCCCAG-AGTTCACACCTTACCTGGAGACAACCTCGGACAACCAATTCAGAGTTTTGAAC
    TTACAAATGCCCGGAAGTTTTTACCTTACCGAGATACAAAAATTGGACAGCCAGTAATTCAGAAGTATGAAC
                    460
                               470
                                          480
    550 560 570 580 590 600 610 AGGTGGGAACAAAAGTGAATGTGACCGTAGAAGATGAACGGACTTTAGTCAGAAGGAACACTTTCCTAA
    560
                             540
                                        550
    0 630 640 650 660 670 680 690 690 690 690 690 690 690 690 690
    czcłacachaciiiiiidachazachacachiathartettacathtcachhacactchhacachachhach
     590
                600
                          610
                                      620
                                                630
                                720
                                            730
                                                       740
                                                                  750
    AAACAGCCĂAAACAACACTAATGAGTTTTTGATTGATGTGGATAAAGGAGAAAACTACTGTTTCAGTGTTC
                                    690
   660
```

ĄĄĢÇÁĠŤĠĄŢŢĊĊĊŤĊĊĊĠĄĄĊĄĠŤŤĄĄĊĊĠĠĄĄĞĂĞTĄĊĄĠĄĊĄĠĊĊĠĠŦĄĠĂĞŤĠŦĄ-ŢĠĠĠĊĊĄĠĠĄĢ

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ĊĀŦĠĠĀĀĀĠĠĀĀĀĊĀĊŦĊŦŦŦĠĠĀĀĊŤĊĀŤĠĠĠĠĀĠĠĀĀĊĠĊĊĀŤ—
     380
                                       410
                                                420
                                                          430
                                   510
   TGAGAACTCCCCAG-AGTTCACACCTTACCTGGAGACAAACCTCGGACAGCCAACAATTCAGAGTTTTGAAC
   ttacaaatgcccggaagtttttaccttaccgagatacaaaattggacagccagtaattcagaagtatgaac
                            470
                                      480
                                               490
                                                         500
   550 560 570 580 590 600 610
AGGTGGGAACAAAGTGAATGTGACCGTAGAAGATGAACGGACTTTAGTCAGAAGGAACAACACTTTCCTAA
   520
                530
                          540
                                    550
                                             560
                                                       570
   0 630 640 650 660 670 680 690
GCCTCCGGGATGTTTTTGGCAAGGACTTAATTTATACACTTTATTATTGGAAATCTTCAAGTTCAGGAAAGA
   610
                                  620
                                           630
              600
                                                     640
                                                               650
   700 710 720 730 740 750 760 AAACAGCCAAAACAACCACTAATGAGTTTTTGATTGATGTGGATAAAGGAGAAAACTACTGTTTCAGTGTTC
   AAACAAACACTACACATACCAATGAATTCTTGATTGATGTGGAAAAGGGGGTAAGCTACTGCTTCTCCACAC
            670
                      680
                                690
                                         700
                                                   710
   660
                                                             720
                           790
                                     800
                                              810
                                                        820
   AAGCCGTGATTTTCTCCAGGAAAACTAACCACAAGAGCCCCAGAAAGCATCACCAAGTGCACTGAGCAATG-G
          740
                    750
                              760
                                       770
                                                 780
   AAAGGGGAATTCAGAGAAATATTCTACATCATTGGAGCTGTGGTATTTGTGGTCATCATCCTTGTCATCATC
   AAGAGTGTCCTGGGAGAAACACTCATCATTGTGGGAGCAGTGGTGTTCTTGTCTTTATCATCCTG
         810
                   820
                             830
                                      840
                                                850
                                                          860
                                                                    870
                        930
                                  940
                                           950
   CTGGCTATATCTCTACACAAGTGTAGAAAGGCAGGAGTGGGGCAGAGCTGGAAGGAGAACTCCCCACTGAAT
   900
                                     910
                                                           930
                 890
                                              920
       880
  980
   GTTTCATAA
   TTGGCATAGACGAGGAGGCTGACGCTGCTGACTGTCACACTGCCCAGACGGCACTGTTA
                  960
                                      980
11. FURM-969863-FIG2.SEQ (1-987)
                Rattus norvegicus Sprague-Dawley tissue factor pro
     RN07619
                standard; RNA; ROD; 1683 BP.
     U07619;
     25-MAR-1994 (Rel. 39, Created)
25-MAR-1994 (Rel. 39, Last updated, Version 1)
     Rattus norvegicus Sprague-Dawley tissue factor protein mRNA,
     complete cds.
     Rattus norvegicus (rat)
     Eukaryota; Animalia; Metazoa; Chordata; Vertebrata; Mammalia;
Theria; Eutheria; Rodentia; Myomorpha; Muridae; Murinae.
     [1]
     1-1683
     Rosenfield C., Guha A., Nemerson Y., Taubman M.B.;
     "Rat tissue factor: its protein sequence and clotting properties are divergent from that of the mouse":
     Unpublished.
     [2]
     1-1683
     Rosenfield C.;
     Submitted (09-MAR-1994) to the EMBL/GenBank/DDBJ databases.
     Claire-Lise Rosenfield, Medicine, Mount Sinai School of Medicine,
     One Gustave L. Levy Place, New York, NY 10029, USA
```

ID

XX AC XX

DT

DT XX DE XX DE XX XX OS OC

DC XX RN RP RA

RT RT

RL.

XX RN

RP

RA

RT RL

RL

XX

NCBI ni: 464010

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 DEFINITION
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 ACCESSION
             U07619
 KEYWORDS
 SOURCE
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             Eutheria; Rodentia; Myomorpha; Muridae; Rattus.
 REFERENCE
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             Rosenfield, C., Guha, A., Nemerson, Y. and Taubman, M.B.
   AUTHORS
             Rat tissue factor: its protein sequence and clotting properties are divergent from that of the mouse
   TITLE
   JOURNAL
             Unpublished
   STANDARD
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             2 (bases 1 to 1683)
Rosenfield,C.
 REFERENCE
   AUTHORS
   TITLE
             Direct Submission
             Submitted (09-MAR-1994) Claire-Lise Rosenfield, Medicine, Mount
   JOURNAL
             Sinai School of Medicine, One Gustave L. Levy Place, New York, NY
             10029, USA
  STANDARD
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Residue Identity =
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                           Conservative Substitutions
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                                                     --666667676
                               CTCG+GTAGCGTAGCC+CC-
                                                     20
    60
    CGTCGCTCGGACGCTCCTGCTCGGCTGGGTCTTCGCC--CAGGTGGCCGGCGCTTCAGGCA---CTACAAAT
    CCTCGCGCCCAC-CT--TTCTCGGCT--TCCTTCTCCTTCAGGTGGCCGTTGGTGCAGGCACTCCTCCAGGG
   100
                               240
    ACTGTGGCAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCCAAACCC
    AAAG-CGTTTAATTTAACTTGGATATCAACTGATTTCAAGACAATCTTGGAGTGGCAACCGAAACCCACCAA
       170
                 180
                           190
                                     200
                                                210
                                                          220
                              310
    GTCAATCAAGTCTACACTGTTCAAATA-AGCACTA-AGTCAGGAGATTGGAAAAAGCAAATGCTTTTACACAA
    CTATACCTACACTGTTCAGATAAGCGATAGATCTAGAAACTGGA-AATACAAATGCA
                                                                  CTGGAÁCCACÁ
                                              280
     240
               250
                                   270
                                                         290
                         260
                      370
                                   380
                                                 390
                                                             400
    CAGACACAGAGTG---TGACCTCACCGA---CGA-GATTGTGAA--GGA--TGTGAAGCA---GACGTA-CT
    GACACTGAGTGTGAGCTCACCGACGAGATTGTGAAGGATGTGAACTATGAACCAAGGGTCCTATCT
        310
                  320
                            330
     0 420 430 440 450 460 470
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tcctgtagcgtagccaaccaccaccactgdtahagccccaadacctcaccattagcacattagcattcc
                                         100
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                                                                               120
O 120 130 140 150 160 170 180 CTGCCTGGCCCGGGGTCCGCCGCGCGCGCCGCGCCCCGGGGTCGCTCGGCTGGCTCGGCTGGGTCTCGGC
--tcatc----cc---cc-ccccccctctAc-cacctctcccccccc---tttctcacctcctcctctctc
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                                        300
                                                      310
                                                                            320
                                                                                               330
330 340 350 360 370 GGAGATTGGAAAAGCAAATGCTTTTACACAACAGACAGAGTGTGACCTCA-CCGA---CG---AGATTGT
GGAAA---AACAAG-TGCTTCTCGACCAC-AGACACCGAGTGCGACCTCACAGACGAGATCGTGAAGGATGT
                                                           380
370 400 410 420 430 440 GA--AGG--ATGTGAAGCAGGGAATGTGGAGAG
GACCTGGGCCTATGAAGCAAAGGTCCTCTCTGTCCCACGGAGGAACT----CAGTTCATGG-AGACGGAGAC
                     430 440
                                                             450
O 460 470 480 490 500 510 CACC----GGTTC-TGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAGTTCACACCTTACCTGGAGACAAAC
CAACTTGTGATTCATGGGGAGGAGCCGCCATTTACAAACGCCCCAAAGTTTTTACCTTACCGAGACACAAAC
520 530 540 550 560 570 580 CTCGGACAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTAGAAGATGAACGG
ctreed care control of the control o
                       570
                                        580
                                                      590
90 600 610 620 630 640 650 660
ACTITAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTTTGGCAAGGACTTAATTTATACACTT
ACATTAGTCAGAAAGAATGGTACATTCCTCACCTGCGGCAAGTCTTTGGCAAGGACTTGGGTTATAATT
      630
                                         650
                                                           660
                                                                            670
720
                                                    730
                                                                       740
GAAGAAGGAGTAAGCTACTGCTTTTTTGTACAAGCTATGATTTTTTCTCCAGGAAAACTAACCAAAATAGCCCA
                780
                                  790
                                                    800
                                                                      810
810 820 830 840 850 850 860 870 GACAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGG--GAATT--CAG--AGAAATATTCTACATCATTGGA
GGAAG--CAGTACAGTG--TGCACC--GAGCAATGGAAGAGTTTCCTGGGAGAAACACTCATCATTGTGGGA
                                       860
                                                            870
880 890 900 910 920 930 940 GCTGTGGTATTTTTGTGGTCATCATCCTTGTCATCCTGGCTATATCTCTACACAAGTGTAGAAAGGCAGGA
920
                                       930
                                                        940
950 960 970 980 X
GTGGGGCAGAGCTGGAAGGAGAACTCCCCACTGAATGTTTCATAA
gggggacacagagagda---Agaagagccccgrcggggrtggcatagagagaaagggggaaggcggaaggcgctgac
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ACTGCCTGCACGGCACTGTTGCG
1050 1060
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                                  530
   500
             510
                        520
                                             540
                                                       550
                                                                  560
                                                680
                           660
                                      670
    630
                                                     620
           580
                      590
                                600
                                           610
                         730
                                   740
                                              750
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    CACCAATGAATTCTCGATTGATGTCGAAGAAGGAGTAAGCTACTGCTTTTTTGTACAAGCTATGATTTTCTC
                   660
                              670
                                        680
                                                   690
                                                              700
         650
  780
                       800
                                 810
                                            820
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    CAGGAAAACTAACCAAAATAGCCCAGGAAG--CAGTACAGTG--TGCACC--GAGCAATGGAAGAGTTTCCT
                            740
                                                                  770
                                                                            780
       720
                 730
                                        750
                                                     760
    850 860 870 880 890 900 910 G-AGAAATATICTACATCATCGAGGCTGTGGTATTTGTGGTCATCATCCTTGTCATCATCCTGGCTATATC
    820
                                                     830
           790
                     800
                                810
                                                                840
                         940
                                              960
                                   950
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                                        890
                                                                 910
         860
                   870
                              880
                                                      900
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                    940
                               950
9. FURM-969863-FIG2.SEQ (1-987)
   MUSTF
                Mouse tissue factor (atf) mRNA, complete cds.
             MUSTF
                                                                  15-DEC-1989
 LOCUS
                          1821 bp ss-mRNA
 DEFINITION
             Mouse tissue factor (mtf) mRNA, complete cds.
 ACCESSION
             M26071
             membrane-bound glycoprotein; tissue factor.
Mouse (strain BALB/c) fibroblast 3T3 cell line, cDNA to mRNA, and DNA (bp 1-41), clone 3CH 482.
 KEYWORDS
 SOURCE
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             Mus Ausculus
             Eukaryota; Animalia; Chordata; Vertebrata; Mammalia; Theria;
Eutheria; Rodentia; Myomorpha; Muridae; Murinae.
 REFERENCE
                (bases 1 to 1821)
             Hartzell, S., Ryder, K., Lanahan, A.A., Lau, L.F. and Nathans, D.
   AUTHORS
             A growth factor-responsive gene of murine BALB/c 3T3 cells encodes a protein homologous to human tissue factor Mol. Cell. Biol. 9, 2567-2573 (1989)
   TITLE
   JOURNAL
   STANDARD
             full automatic
             Draft entry and computer-readable sequence for [1] kindly submitted
by S.Hartzell, 12-JUL-1989.
NCBI gi: 201924
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632 Mismatches = 321
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Initial Score
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Residue Identity =
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590

600

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8. FURM-969863-FIG2.SEQ (1-987)
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DEFINITION
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                                                                  23-JAN-1991
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                                                        ROD
             Mouse tissue factor ARNA, complete cds. M57896 J05713
ACCESSION
KEYWORDS
             tissue factor.
SOURCE
             Mouse (strain AKR) embruo fibroblast, cDNA to mRNA, clone c70.
   ORGANISM
             Mus Ausculus
             Eukaryota; Animalia; Chordata; Vertebrata; Mammalia; Theria;
             Eutheria; Rodentia; Myomorpha; Muridae; Murinae.
REFERENCE
                (bases 1 to 1262)
   AUTHORS
             Ranganathan, G., Blatti, S.P., Subramaniam, M., Fass, D.N., Maihle, N.J.
             and Getz, M.J.
   TITLE
             Cloning of murine tissue factor and regulation of gene expression
             by transforming growth factor type beta-1
J. Biol. Chem. 266, 496-501 (1991)
   JOURNAL
   STANDARD
             full automatic
NCBI gi: 201926
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      Source
                       /organism="Mus_musculus"
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Residue Identity =
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Gaps
                            Conservative Substitutions
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                                                                 10
                                                                            20
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    CAGCCCTTGGACATGGCGATCC-
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                            --Tegtg
                                     --cG
          30
                     40
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                                                               70
                                                    60
                                  190
                                             200
                                                        210
                        180
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        ctceectecctcctcctcheetearceceetecheechttecheagaanae-cetttaatttaactt
           90
                     100
                               110
                                          120
                                                    130
                                                                140
                                590
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    GGAŤATCÁÁCŤGÁTTŤCÁAGAĆÁ---
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                                             190
                                                        500
                                                                  210
                                  180
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         160
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                                       390
                                                  400
                                                            410
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A60 A70 A80

```
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                            950
                                       960
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 ectedetettedecededetedecettedetadetadetadetedecedecetedadecegaaacacace-
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 990
                  1010
                                    1030
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                                    1100
                  1080
 310 320 330 340 350 360 370 CAAATAAGC-ACTAAGTCAGGAGAGTGTG-GAAAAGCAAATGCTTTTACACAACAGACAGAGTGTGAC-CTC
 arccccccccchaceancrcaectecerchcchacccaectrah-Arah---Accahatccarcaect
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 380 390 400 410 420 430 440 ACCGACGAGAGATTGTGAAGGATGTGAAGCAGAGGACGTACTTGGCACGGGTCTTCTCCTACC-CGGCAGGGAAT--
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                      1220
                               1230
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 ctcggggtgtccgagtaat--tggactgttgttgcataagcggact---tttagctccggtttaactctgg
             1280
                        1290
                                 1300
                                            1310
 10 520 530 540 550 560 570 AGACAAACCT---CGGACAACAATTCAGAGTTTTGAACAGTGGGAACAAAAGTGAATGTGACCGT
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                                  1370
                                            1380
 580 590 600 610 620 630 AGAAGATGAACACTT--TCCTAAGCCTCCGGGATGTTTT--
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                       1430
                                          1450
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                                  1510
 710 720 730 740 750 760 770 AAÇACTAATGAGTTTTTGATTGATGTGGATAAAGGAGAAAACTACTGTTTCAGTGTTCAAGCAGTGATTCCC
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              1560
1540
        1550
                          1570
                                   1580
 780 770 800 810 820 830 840 TCCCGGAACAGTTAACCGGGAGAAGAGTACAGACAGCC---CGGTAGAGTGTATGGGCCAGGAGAAAGGGGAATTC
 tgCTG---CGT--ACTGCCAAAG--CACACCTTCATAAGAAATAAT-CCTCATCCA--ATACAGCCGA---C
 1610
 GGTGTGACAGGCCACA-CGTCCCCG-TG-GGTCTCTGTGG-----AAGTTT-----CAGTGTAGCGACATTT
                                 1700
           1680
                       1690
 920 930 940 950 960 970
C-TACACAAGTGTAGAAAGGCAGGAGTGG---GGCAGAGCTGGAAGGAG----AACTC----CCCAC-TG--
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   1730
           1740
                    1750
                           1760
                                     1770
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```
7. FURM-969863-FIG2.SEQ (1-987)
                  Human tissue factor gene, complete cds.
 LOCUS
               HUMTFPB
                             13865 bp ds-DNA
                                                               PRI
                                                                           15-JUN-1989
 DEFINITION
               Human tissue factor gene, complete cds.
 ACCESSION
               J02846
 KEYWORDS
               Alu repeat; cell surface integral membrane protein;
               cell surface receptor; tissue factor.
Human DNA, clones lambda-TF[559,679,753,885,1377].
 SOURCE
   ORGANISM
               Homo sapiens
               Eukaryota; Animalia; Chordata; Vertebrata; Mammalia; Theria;
               Eutheria; Primates; Haplorhini; Catarrhini; Hominidae.
1 (bases 1 to 13865)
 REFERENCE
   AUTHORS
               Mackman, N., Morrissey, J.H., Fowler, B. and Edgington, T.S.
               Complete sequence of the human tissue factor gene, a highly
   TITLE
               regulated cellular receptor that initiates the coagulation protease
               cascade
   JOURNAL
               Biochemistry 28, 1755-1762 (1989)
               full automatic
Draft entry and computer-readable sequence for [1] kindly provided by J.H.Morrissey, 25-OCT-1988.
NCBI gi: 339505
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                                                                 Mismatches
                                Conservative Substitutions
Gaps
                                                                 X 10 20 CTCGCACTCCCTCTGGCCGGCC
    TATAGCGCGCGGGCACCCCCAAGACTGCGAGCTCCCCGCACCCCCTCGCACTCCCTCTGGCCGCCC
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780 790 800 810 820 X 830 840

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CGAGCTCCCACAAACTCTGGGCTCCCCGCATCCCTCCCGGTTCATCCCGCAGCCCCA-GGTGCCTCCAGCCC
 O 50 90 90 AACCTCCC--CAGCCCCAC-------GGGCGCCACGGAACCGCTCGATCTCGCCGCCAACTGGT
 AACCTCGCAGCATCCTCAGCCTCTCCAGCCTCCGGGGCTCAGCGGAATTTTTGAGACCTCGCCGTCAGCTCCG
 100 110 120 130 140 150 150 AGACATGGAGACCCCTGCCTGGCCCGGGGTCCCGGGGCCCCGAGACCGCCGTCGCTCGGACGCTCCTGCTCGG
 GGACATGGCGACCCCCAACGGGCCCCGGGGTGCCCCCAGGCCGCAGTCGCCCCCAGGCCGCTCTTCTATTCGG
 170 180 190 200 210 220 230 CTGGGTCTTCGGCCAGGTGGCGGGGGTTCAGGCACTACAAATACTGTGGCAGCATATAACTTTGGAA
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 320 330 340 350 360 370 380 CACTAAGTCAGGAGATTGGAAAAGCAAATGCTTTTACACAACAGACACAGAGTGTGACCTCACCGAGGAT
 390
                                 400
 390 400 410 420 430 440 450 TGTGAAGGATGTGAAGCAGGGTACTTGGCACGGGTCTTCTCCTACCCGGCAGGGAATGTGGAGAGCACCGG
 tetenagatetelegagagacatartteecadagteetricetaceeecadacact-----adca---e
              450
                       460
 460 470 480 490 500 510 520 TTCTGCTGGGGGACCTCTGTATGAGAACTCCCCAGAGTTCACACCTTACCTGGAGACAAACCTCGGACAGCC
 500
            510
                    520
                             530
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 530 540 550 560 570 580 590 AACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTAGAAGATGAACGGACTTTAGTCAG
 AAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTTGGCAAGGACTTAATTTATACACTTTATTATTGGAA
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                 660
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640
                                  680
 740
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                      810
                              820
                                       830
 820 830 840 850 860 870 880 AGAGTGTATTGGGGCCAGGAGAAGGGGGAATTCAGAGAATATTCTACATCATTGGAGCCTGTGGTATTTGTGGT
 CANGELGCACTAGCCACGAGAAAGTTCTGECCACAGAACETTECETCAECATTGGCCACAGEGAEGGEGAEA
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 890 900 910 920 930 940 950
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 GGAGAACTCCCCACTGAATGTTTCATAA
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1000 1010 1020 1030
                             1040 1050 1060 1070
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CAGCCAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTAGAAGATGAACGGACTTTA
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       450
                 460
                           470
                                     480
                                                490
                                                          500
                                                                    510
    600 610 620 630 640 650 660 GTCAGAAGGACTAATTTATATATTAT
    dtchdalacahtggghcattccthactctccddcttatttachachddhatachtghattachcactttatthc
    520
               530
                         540
                                   550
                                              560
                                                        570
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   59Õ
                       610
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                                                              720
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                                                                        870
       810
                     820
                               830
                                         840
                                                    850
                                                              860
        960
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   CGGGAAGGAGAGCTCCCCCTGAACATCGCCTGAAGGGAGCGCCGCGGGGGGCGTGCCGGCTGCCAATGCT
    GTGTTGCACTGT
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6. FURM-969863-FIG2.SEQ (1-987)
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LOCUS
                          1877 bp
                                                                10-JUL-1992
             S74147
                                     ARNA
                                                      MAM
DEFINITION
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ACCESSION
             S74147
KEYWORDS
SOURCE
             cattle adrenal gland
            Bos sp.
  ORGANISM
             Unclassified.
REFERENCE
                (bases 1 to 1877)
            Takayenoki,Y., Muta,T., Miyata,T. and Iwanaga,S. cDNA and amino acid sequences of bovine tissue factor Biochem. Biophys. Res. Commun. 181, 1145-1150 (1991) full automatic
   AUTHORS
   TITLE
   JOURNAL
   STANDARD
COMMENT
             GenBank staff at the National Library of Medicine created this
             entry [NCBI gibbsq 74147] from the original journal article. This sequence comes from Fig.2.

NCBI gi: 241438
FEATURES
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Initial Score
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Residue Identity =
                      76%
                                                  770 Mismatches
                           Matches
                           Conservative Substitutions
Gaps
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X 10 20 30 CTCGCACTCCCTCTGGCCGGCCCAGGGGGGCCTTCAGGCC

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                                                                    08-MAY-1991
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                           1753 bp ss-aRNA
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 DEFINITION
             Rabbit tissue factor mRNA, complete cds.
 ACCESSION
              M55390
 KEYWORDS
              tissue factor.
              Rabbit (strain New Zealand white) heart, cDNA to mRNA, clone pRTF1.
 SOURCE
   ORGANISM
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              Eutheria; Lagomorpha; Leporidae.
1 (bases 1 to 1753)
 REFERENCE
              Andrews, B.S., Rehatulla, A., Fowler, B.J., Edgington, T.S. and
   AUTHORS
   TITLE
              Conservation of tissue fator primary sequence among three mammalian
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   JOURNAL
              Gene 98, 265-269 (1991)
             full automatic
   STANDARD
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Initial Score
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Residue Identity =
                       76%
                                                     702 Mismatches
                            Matches
                            Conservative Substitutions
Gaps
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                                    50
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    ctcddctgcttacttdcccdddtactcccdddcachdagdthchaeth-
                                                               -gAGCAHAHAAHcHAACH
                      110
                                 120
                                                             140
            100
                                            130
                                                  280
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     160
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                          180
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                          330
                                     340
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                                                         280
                                                                    290
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              390
                        400
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                                                                  360
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    AcedegtroccoenegagectcoctringenAActcoccedActtcAceccetAcctegAcAcAAAcctcdc
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                                                              386 q
                                                                              278 t
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77% Matches = 613 Mismatches = 169
11 Conservative Substitutions = 0
Initial Score
Residue Identity =
Gaps
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                                                                                                 gchgachctachagth-----
                                                                                                              10
                                           240
                                                                               260
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       GAGCATATAATCTAACTTGGAAGTCAACGAATTTCAAGACAATTCTGGAGTGGGAACCCAAATCCATCGATC
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       ATGTCTACACAGTTCAGATAAGCACTAGGAAAAACTGGAAGAAGAATGTTTCTTAACCGCGCAGACGG
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                                                       120
                                                                            130
                                                                                               140
       370 380 390 400 410 420 430 AGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTCTTCTCCTACCCGG
                                                      390
       170
                                                 190
                                                                 200
                                                                                           210
       440 450 460 470 480 490 500 CAGGGAATGTGGGAGCCACCGGTTCTGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAGTTCACACCTTACC
       chaddangdanahchggadadatreetedadadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatreetedadatre
                                                 260
                                                                     270
                                                                                        280
       510 520 530 540 550 560 570 TGGAGACAAACCTCGGACCAACAACTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTAG
       310
                           320
                                            330
                                                              340
                                                                                 350
      410
                                       670
                                                         680
                                                                          690
                                                                                             700
       450
                                    470
                                                                    490
                                                                                               500
                                                                                                              510
                    460
                                                     480
       550
                                                                        560
       800 810 820 830 840 850 860 GGAAGAGTACAGACAGCCCGGTAGAGTGTATGGGCCAGGAGAAGGGGGAATTCAGAGAAATATTCTACATCA
       ĸĠŖĠĠĠĠĊĊĊĠŖĠŖĠĠĊŢĊĸĊŦĠŖĠĬĠĊŖĊĊĸĠĊĠĠĠŖĠĊŖĠĠĠĠĸĠĠĊŖĠĠĠŖĠŖŦĠŦŦĊŢŦĠŖŦĊŔ
                600
                                 610
                                                   620
                                                                     630
                                                                                        640
       870 880 890 900 910 920 930 TTGGAGCTGTGGTATTTTGTGGTCATCATCCTTG-TCATCATCCTGGCTATATCTCTACACAAGTGTAGAAAG
       HTGGAGCAGTGGTGGTCGTGGCCCT----CTTGATCATCGTCCTGTGTGACCGTGTACAAGTGCAGAAAG
                                                    690
                                                                       700
                                                                                         710
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       CGGCTGCTGCCAATGCTGTGTTGCACTGT
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/number=4

5. FURM-969863-FIG2.SEQ (1-987)
RABRIE Rabbit tissue factor mRNA, complete rds

```
480
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                                                                                                                                   470
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             410
                                           420
                                                                             430
                                                                                                              440
                                                                                                                                                 450
                                                                                                                                                                                   460
                                                                                                                                                                                                                     470
                                                         520
                                                                                          530
                                                                                                                            540
                                                                                                                                                              550
                                                                                                                                                                                                560
             CTGGAGACAAACCTCGGACAGCCAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTA
             t-felaga-caract-celas-caracter for the felacate for the felacater 
                                                                                                       510
                                                                                                                                         520
                                                                                                                                                                                                             540
                                    490
                                                                      500
                                                                                                                                                                            530
                                                                                                                                                                                                                                               550
                580
                                                                                   600
                                                                                                                     610
                                                                                                                                                       620
                                                                                                                                                                                         630
             GAAGATGAACGGACTTTAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTTGGCAAGGACTTA
             590
                                                                                                                                                                                                      610
                              560
                                                               570
                                                                                                 580
                                                                                                                                                                     600
                                                                                                                                                                                                                                        620
                                                                                                                                                690
                                                                             670
                                                                                                              680
                                                                                                                                                                                  700
          650
             640
                                                                                          650
                                                                                                                            660
                                                                                                                                                             670
                       630
                                                                                                                                                                                                680
            TTGATTGÁTĞTGGATAAÁĞĞAGAAAACTÁČTGTTTCAĞTĞTTCAAGCÁĞTGATTCCCTCCCGAACAGTTÁAC
                700
                                                 710
                                                                                  720
                                                                                                                    730
                                                                                                                                                      740
                                                                                                                                                                                         750
                                                                                                                                                                                                                           760
             800 810 820 830 840 850 860 CGGAAGAGTACAGACAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGGAATTCAGAGAAATATTCTACATC
             CGGYYGY CANTAIN THE STANDARD S
          770
                                                                            790
                                                                                                              800
                                                                                                                                                                                  820
                                                                                                                                                810
                                                                                                                                                                                                                    830
                                                                                                                                                                                                                                                      840
                                                                                          890
                                                                                                                            900
             ATTGGAGCTGTGGTATTTGTGGTCATCATCCTTGTCATCATCCTGGCTATATCTCTACACAAGTGTAGAAAG
             ATTECHECIATER TO THE SECRET OF 
                                    850
                                                                     860
                                                                                                       870
                                                                                                                                         880
                                                                                                                                                                           890
                                                                                                                                                                                                             900
                                                                                                                                                                                                                                               910
                                                                                   960
             GCAGGAGTGGGGCAGAGCTGGAAGGAGAACTCCCCACTGAATGTTTCATAA
             dchddagtedddhaaggtddhaaddagahactccccagtdaatdtttchtaaaggaaggactgttggagctac
                                                               930
                                                                                                940
                                                                                                                                   950
                                                                                                                                                                    960 X
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                       990
                                                    1000
                                                                                      1010
4. FURM-969863-FIG2.SEQ (1-987)
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                                                    O.cuniculus mRNA for brain tissue factor
                                           OCBTF
                                                                                      1300 bp
                                                                                                                           RNA
                                                                                                                                                                                                                    31-0CT-1991
   DEFINITION
                                         O.cuniculus mRNA for brain tissue factor
   ACCESSION
                                          X53521
   KEYWORDS
                                           brain tissue factor.
   SOURCE
                                           rabbit
          ORGANISM
                                          Oryctolagus cuniculus
                                           Eukaryotā; Animalia; Metazoa; Chordata; Vertebrata; Mammalia;
                                           Theria; Eutheria; Lagomorpha; Leporidae.
   REFERENCE
                                           1 (bases 1 to 1300)
          AUTHORS
                                          Pawashe, A.B.
                                           Direct Submission
          TITLE
                                           Submitted (03-JUL-1990) Pawashe A.B., Yale University, SHM C 115,
          JOURNAL
                                           Dept. of Molecular Biophisics & Biochemistry, 333 Cedar Street, POB
                                           3333, New Haven, CT 06510, USA.
          STANDARD
                                          full automatic
                                           2 (bases 1 to 1300)
   REFERENCE
                                           Pawashe, A.B., Konigsberg, W.K. and Ezekowitz, M.D.
          AUTHORS
          TITLE
                                           Molecular Cloning, Characterization and Expression of cDNA for
                                           Rabbit Brain Tissue Factor
          JOURNAL
                                           Thromb. Haemost. 66, 315-320 (1991)
                                          full automatic
NCBI gi: 1495
          STANDARD
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3. FURM-969863-FIG2.SEQ (1-987)
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 LOCUS
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 DEFINITION
                        Human tissue factor mRNA, complete cds, with an Alu repeat in the
                        3' untranslated region.
 ACCESSION
                        Alu repeat; plasma membrane glycoprotein; tissue factor.
 KEYWORDS
 SOURCE
                        Human placenta, cDNA to mRNA, clones lambda-hTF[3,7,8,12].
     ORGANISM
                        Hono sapiens
                        Eukaryota: Animalia: Chordata: Vertebrata: Mammalia: Theria: Eutheria: Primates: Haplorhini: Catarrhini: Hominidae.
                       1 (bases 1 to 2104)
Scarpati, E.M., Wen, D., Broze, G.J.Jr., Miletich, J.P., Flandermeyer, R.R., Siegel, N.R. and Sadler, J.E.
 REFERENCE
     AUTHORS
     TITLE
                        Human tissue factor: cDNA sequence and chromosome localization of
                        the gene
Biochemistry 26, 5234-5238 (1987)
     JOURNAL
     STANDARD
                        full automatic
                       Draft entry and computer-readable sequence for [1] kindly provided
by E.M.Scarpati, 04-AUG-1987.
NCBI gi: 339503
  COMMENT
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                                        DERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGENYC
FSVGAVIPSRTVNRKSTDSPVECMGQEKGEFREIFYIIGAVAFVVIILVIILAISLHK
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 BASE COUNT
                               602 a
                                                437 c
 ORIGIN
                        Smal site; chromosome 1.
                                         958
                                                                                           961 Significance = 69.34
961 Mismatches = 2
                                                 Optimized Score =
Initial Score
                                         99%
                                                 Hatches
Residue Identity =
                                                                                 =
                                            0
                                                 Conservative Substitutions
Gaps
       CTCGCACTCCCTCTGGCCGGCCCAGGGCCCTTCAGCCCAACCTCCCCAGGCCCCACGGGCGCCACGGAACCC
                                                   de de la companya del companya de la companya del companya de la c
                                                                                      20
                                                                                                         30
                                                                   10
                                                                                                                            40
       80
                                                                                                   100
       GTCGCTCGGACGCTCCTGCTCGGCTGGGTCTTCGCCCAGGTGGCCGGCGCTTCAGGCACTACAAATACTGTG
                    130
                                       140
                                                         150
                                                                            160
                                                                                               170
                                                                                                                  180
                                                                                                                                     190
                                              240
                                                                 250
                                                                                    590
       GCAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCCAAACCCGTCAAT
       GCAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCCAAACCCGTCAAT
                                                                                            240
                 200
                                   210
                                                      220
                                                                                                                                 260
       CAAGTCTACACTGTTCAAATAAGCACTAAGTCAGGAGATTGGAAAAGCAAATGCTTTTACACAACAGACACA
       270
                               280
                                                  290
                                                                     300
                                                                                        310
                                                                                                           320
                                                                                                                             330
                                       380
                                                          390
                                                                            400
       GAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTCTTCTCCTACCCG
       340
                            350
                                              360
                                                                370
                                                                                    380
                                                                                                       390
                                                                                                                          400
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CTCGCACTCCCTCTGGCCGGCCCAGGGCGCCTTCAGCCCAACCTCCCCAGGCCCCACGGGCGCCACGGAACCC
   $\delta \delta \
                                              20
                                                                      30
                                                                                               40
   100
                                                                                      110
                                                                                                               120
                                                                                  180
                                                                                                           190
   GTCGCTCGGACGCTCCTGCTCGGCTGGGTCTTCGCCCAGGTGGCCGGCGCTTCAGGCACTACAAATACTGTG
   etcectceevectoric terminal and the contract of the contract of
          150
                                                          170
                                                                                                          190
                                 160
                                                                                  180
                                                                                                                                  200
  220 230 240 250 260 270 280 GCAGCATATAATTTAACTTGGAAATCAACTAATTTCAAGACAATTTTGGAGTGGGAACCCAAACCCGTCAAT
   dcadcatataatttaacttggaaatcaactaatttcaagacaattttggagtggaaccaaaaccgaaac
                                                                             250
                                                                                                      260
                                                     240
290
   CAAGTCTACACTGTTCAAATAAGCACTAAGTCAGGAGATTGGAAAAGCAAATGCTTTTACACAACAGACACA
  290
                       300
                                                310
                                                                        320
                                                                                                330
                                                                                                                         340
                                                                                                                                                 350
  370 380 390 400 410 420 430 GAGTGTGACCTCACCGACGACATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTCTTCTCCTACCCG
  390
                                                                                            400
                                                                                                                    410
  GCAGGGAATGTGGAGAGCACCGGTTCTGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAGTTCACACCTTAC
   dchdddantdfddadadadadachfeldddadadadafdahfdadahdteddadadffdadad
                                      450
                                                              460
                                                                                      470
                                                                                                               480
                                                          530
                                                                                  540
                                                                                                           550
                                                                                                                                   560
   CTGGAGACAAACCTCGGACAGCCAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTGAATGTGACCGTA
   540
                                 520
                                                                                                          550
         510
                                                          530
                                                                                                                                  560
                                                                                                                                                           570
  580 590 600 610 620 630 640 GAAGATGAACGGACTTTAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTTTGGCAAGGACTTA
                                                     600
  590
                                                    600
                                                                            610
                                                                                                     620
650
                                                                        680
  650
                       660
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                                                                                                690
                                                                                                                        700
                                                                                                                                                 710
                                                                                                                                                                          720
  740
                                                                   750
                                                                                           760
                                                                                                               840
                                                              820
                                                                                       830
   CGGAAGAGTACAGACAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGGAATTCAGAGAAATATTCTACATC
  800
                                      810
                                                              820
                                                                                       830
                                                                                                               840
                                                                                                                                       850
                                                                                                                                                                860
                                                          890
                                                                                  900
                                                                                                           910
  ATTGGAGCTGTGGTATTTGTGGTCATCATCCTTGTCATCATCCTGGCTATATCTCTACACAAGTGTAGAAAG
                                                          890
                                                                                  900
         870
                            950
                                                     960
                                                                             970
   GCAGGAGTGGGGCAGAGCTGGAAGGAGAACTCCCCACTGAATGTTTCATAA
  GCAGGAGTGGGGCAGAGCTGGAAGGAGCACTCCCCCACTGAATGTTTCATAAAGGAAGCACTGTTGGAGCTAC
                                                                             970
                                                                                                                              990
                                                                                                     980
   TGCAAATGCTATATTGCACTGTGACCGAG
```

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660
                                                680
                                                           690
     640
                650
                                     670
    700
   650
              660
                        670
                                   680
                                              690
                                                                    710
                                                                              720
                                   740
                                              750
                                                         760
    ACTAATGAGTTTTTGATTGATGTGGATAAAGGAGAAAACTACTGTTTCAGTGTTCAAGCAGTGATTCCCTCC
    740
                                 750
                                            760
                                                       770
                                                                 780
           730
           790
                                            820
                                                                            850
                      800
                                 810
                                                       830
    CGAACAGTTAACCGGAAGAGTACAGACAGCCCGGTAGAGTGTATGGGCCAGGAGAAAGGGGAATTCAGAGAA
    800
                    810
                               820
                                          830
                                                    840
                                                               850
                                                                          860
                    870
                              880
                                          890
                                                    900
                                                               910
         860
    ATATTCTACATCATTGGAGCTGTGGTATTTGTGGTCATCATCCTTGTCATCATCCTGGCTATATCTCTACAC
       870
                  880
                            890
                                       900
                                                  910
                                                             920
                                                                        930
                                       960
    AAGTGTAGAAAGGCAGGAGTGGGGCAGAGCTGGAAGGAGAACTCCCCACTGAATGTTTCATAA
    AAGTGTAGAAAGGCAGGAGTGGGCAGAGCTGGAAGGAGAACTCCCCACTGAATGTTCATAAAGGAAGCAC
                950
                          960
                                     970
                                                980
                                                           990
     940
                                                                     1000
    TGTTGGAGCTACTGCAAATGCTATATTGCACTGTGACCGAG
  1010
             1020
                       1030
                                  1040
2. FURM-969863-FIG2.SEQ (1-987)
   HUMTFPC
                 Human tissue factor gene, complete cds, with a Alu
                           2127 bp ss-mRNA
             Human tissue factor gene, complete cds, with a Alu repetitive sequence in the 3' untranslated region.
 DEFINITION
             M27436
 ACCESSION
 KEYWORDS
              Alu repeat; plasma membrane glycoprotein; tissue factor;
              transmembrane protein.
              Human adult adipose, cDNA to mRNA, clone lambda-TF14.
 SOURCE
   ORGANISM
             Homo sapiens
             Eukaryota; Animalia; Chordata; Vertebrata; Mammalia; Theria; Eutheria; Primates; Haplorhini; Catarrhini; Hominidae.
 REFERENCE
                 (bases 1 to 2127)
             Fisher, K.L., Gorman, C.M., Vehar, G.A., O'Brien, D.P. and Lawn, R.M. Cloning and expression of human tissue factor cDNA Thromb. Res. 48, 89-99 (1987)
   AUTHORS
   TITLE
   JOURNAL
   STANDARD
             full automatic
             Draft entry and computer-readable copy of sequence [1] kindly submitted by K.L.Fisher, 30-AUG-1989.
NCBI gi: 339507
 COMMENT
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                       100..195
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/note="tissue factor signal peptide"
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      mat_peptide
                       /codon_start=1
/note="tissue factor"
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                       /note="direct repeat flanking Alu sequence"
                       1354..1651
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                       1652..1662
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                       /note="direct repeat flanking Alu sequence"
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                       THKSTNFKTILEWEPKPVNQVYTVQISTKSGDWKSKCFYTTDTECDLTDEIVKDVKQT
                       YLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLGOPTIOSFEOVGTKVNVTVE
DERTLYRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGENYC
                       FSV@AVIPSRTVNRKSTDSPVECHG@EKGEFREIFYIIGAVVFVVIILVIILAISLHK
                       CRKAGVG@SWKENSPLNVS"
                       1..2127
      source
                       /organism="Homo sapiens"
 BASE COUNT
                                               599 t
                  606 a
                           450 с
                                     472 g
 ORIGIN
Initial Score
                       987
                           Optimized Score =
                                                     987
                                                          Significance = 71.51
Residue Identity =
                                                     987
                      100%
                            Matches
                                                          Mismatches
                            Conservative Substitutions
                                                                              0
Gaps.
```

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                                         112..213
           sig_peptide
                                         /codon_start=1
/note="tissue factor version 2 signal peptide"
           mat_peptide
                                         208..996
                                         /codon_start=1
/note="tissue factor version 1"
                                         214..996
           mat_peptide
                                         /codon_start=1
/note="tissue factor version 2"
           CDS
                                         112..999
                                         /gene="F3"
                                         /note="tissue factor versions 1 and 2 precursor: NCBI gi:
                                         339502.
                                         /codon_start=1
                                         /transTation="METPAWPRVPRPETAVARTLLLGWVFA@VAGASGTTNTVAAYNL
                                         THKSTNFKTILEWEPKPVNQVYTVQISTKSGDWKSKCFYTTDTECDLTDEIVKDVKQT
                                        YLARVFSYPAGNVESTGSAGEPLYENSPEFTPYLETNLG@PTI@SFE@VGTKVNVTVE
DERTLVRRNNTFLSLRDVFGKDLIYTLYYWKSSSSGKKTAKTNTNEFLIDVDKGENYC
                                         FSV@AVIPSRTVNRKSTDSPVECMG@EKGEFREIFYIIGAVVFVVIILVIILAISLHK
                                         CRKAGVG@SWKENSPLNVS"
                                         1..2141
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                       /organism="Homo sapiens"
607 a 454 c 478 g 602 t
87 bp upstream of TaqI site [Cell 50, 129-135 (1987)].
 BASE COUNT
 ORIGIN
                                         987 Optimized Score =
                                                                                            987 Significance = 71.51
Initial Score
                                       100% Matches
Residue Identity =
                                                                                            987
                                                                                                    Mismatches
Gaps
                                                 Conservative Substitutions
                              CTCGCACTCCCTCTGGCCGGCCCAGGGCGCCTTCAGCCCAACCTCCCCAGCCCCACGGGC
       CGGGCGAACCCCTCGCACTCCCTCTGGCGGGCCCACGGGGCCTTCAGCCCAACCTCCCAGCGCCCACGGGGC
                                        20
                                                           30
                                                                              40
                                                                                                 50
                      10 X
                                                                                                                    60
       gccycetyrcciectic by the contract of the contr
                                                      100
                                                                                            120
                  80
                                     90
                                                                        110
                                                                                                               130
                                                                                                                                 140
       CCCGAGACCGCCGTCGCTCGGACGCTCCTGCTCGGCTGGGTCTTCGCCCAGGTGGCCGGCGCTTCAGGCACT
       150
                               160
                                                  170
                                                                     240
                                                                                                           260
       ACAÄÄTACTGTGGÄÄGCATATAAŤŤŤAACTTGGÄÄÄTCAACTAÄŤŤTCAAGACÄÄŤTTTGGAGŤGĞGAACCC ACAÄÄTACTGTGGÄÄÄTTTTGGAGŤGĞGAACCC ACAÄÄTACTGTGGÄÄÄTTTTGGAGŤGĞGAACCC
         220
                            230
                                              240
                                                                                                       270
                                                                                                                          280
                                                                 250
                                                                                    590
       280 290 300 310 320 330 340 AAACCCGTCAATCAAGTCTACACTGTTCAAATAAGCACTAAGTCAGGAGATTGGAAAAGCAAATGCTTTTAC
       AAAACCCG+CAA+CAAG+C+ACAC+G+CAAA+AAGCAC+AAG+CAGGAGA++GGAAAAAGCAAA+GC++++AC
     290
                        300
                                           310
                                                             320
                                                                                390
       ACAACAGACACAGAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTC
       ACAACAGACACAGAGTGTGACCTCACCGACGAGATTGTGAAGGATGTGAAGCAGACGTACTTGGCACGGGTC
                    370
                                       380
                                                         390
                                                                             400
                                                                                                410
                                                                                                                                     430
                                                                                                                  420
       TTCTCCTACCCGGCAGGGAATGTGGAGAGCACCGGTTCTGCTGGGGAGCCTCTGTATGAGAACTCCCCAGAG
       440
                                                      460
                                                                                                               490
                                                                                                                                 500
       500 510 520 530 540 550 560 TTCACACCTTACCTGGAGAAAACCTCGGACAGCCAACAATTCAGAGTTTTGAACAGGTGGGAACAAAAGTG
       550
             510
                               520
                                                  530
                                                                     540
                                                                                                           560
                                                                                                                              570
                                580
                                                                     600
                                                                                        610
                                                                                                           620
        AATGTGACCGTAGAAGATGAACGGACTTTAGTCAGAAGGAACAACACTTTCCTAAGCCTCCGGGATGTTTTT
```

590

600

610

620

640

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**** 39 · . . .
                                                                                   39.54
                                                                   ື ວ໒1
560
 4. OCBTF
                     O.cuniculus aRNA for -
                                                                             808
                                                      1753
                     Rabbit tissue factor ARNA.
 RABRTF
                                                                             693
                      **** 30 standard deviations above mean ****
                                                                     443
                                                                             759 30.78
 6. 574147
                     tissue factor [cattle, adrena 1877 443 **** 25 standard deviations above mean ****
                                                            1877
                                                                                              0
 7. HUMTFPB
                     Human tissue factor gene, com 13865
                                                                             516 25.91
                                                                                              0
                                                                    378
                      #*** 23 standard deviations above mean #***
                     Mouse tissue factor mRNA, com
Mouse tissue factor (mtf) mRN
                                                            1262
                                                                             549
                                                                                   23.36
 8. MUSTFA
                                                                      344
                                                                                   23.29
 9. MUSTF
                                                            1821
                                                                      343
                                                                             582
                                                                                              0
                      **** 21 standard deviations above mean ****
                     Rattus norvegicus Sprague-Daw
Rattus norvegicus Sprague-Daw
                                                             1683
10. RRU07619
                                                                      321
                                                                                              0
                                                                             555
                                                                                   21.64
11. RN07619
                                                             1683
                                                                      321
                                                                             555
                                                                                   21.64
                                                                                              0
                       **** 11 standard deviations above mean ****
                                                                             435
                                                                                              0
12. MTPFZ1A
                     M.thermoformicicum complete p
                                                           11014
                                                                     179
                                                                                   11.01
                      **** 8 standard deviations above mean ****
                                                             5840
                                                                     149
                                                                             419
                                                                                     8.76
13. PSEPAHAB
                     P. putida DNA for reductase,
                                                                                              0
                     Bacteriophage Mu genome right 1110 142
Clam cyclin A mRNA, complete 2163 139
**** 7 standard deviations above mean ****
14. XXMU01
                                                                             228
                                                                                     8.24
15. CLMCYCA
                                                                             429
                                                                                     8.01
                                                                                              0
16. $55744
                     T cell receptor variable gamm
                                                              446
                                                                      130
                                                                             197
                                                              604
17. DATCVG1
                                                                      130
                                                                             235
                                                                                     7.34
                                                                                              ٥
                     O.aries rearranged T-cell rec
18. RNSCIII
                     Rat mRNA for brain sodium cha
                                                             6822
                                                                      126
                                                                              407
                                                                                     7.04
                                                                                              0
                      **** 6 standard deviations above mean ****
                     Pig ribonuclease inhibitor (R
19. PIGRI
                                                             1256
                                                                      125
                                                             3433
3360
2287
                     B.germanica mRNA for HMG-CoA
Figure 2. Sequence of the spo
20. BGHMGCOA
                                                                      124
                                                                              426
                                                                                     6.89
                                                                      122
21. M24537
                                                                              410
                                                                                     6.74
                     Bos taurus (clone pCAMPDE-40)
22. BOVCNPA
                                                                             261
                                                                                     6.66
                     Bacillus subtilis penicillin-
Human STS UT1002.
23. BACPBPE
24. HUMUT1002
                                                             5395
                                                                      120
119
                                                                             415
217
                                                                                     6.59
6.51
                                                               532
25. BTCRYB1
                                                                             377
                                                                                     6.51
                     Bovine mRNA for beta-crystall
                                                              860
                                                                      119
26. HSEF1AL9
27. DROGGBCS
                     Human DNA for elongation fact
                                                             1823
                                                                      119
                                                                             336
                                                                                     6.51
                     D.melanogaster (clones T-beta
                                                             4590
                                                                      119
                                                                              416
                                                                                     6.51
28. GOTGLOBE
                                                            10194
                                                                      119
                                                                                     6.51
                     Goat betā globin locus activa
                                                                              421
                                                                                     6.29
29. HSCOMT1
                                                             1844
                                                                              419
                     H.sapiens catechol O-methyltr
                                                                      116
30. AA2LEFT
                                                             2116
                                                                      116
                     adeno-associated virus 2 left
                                                                             284
                                                                             425
425
31. MFAPOA4A
                     M.fascicularis gene for apoli
                                                             2858
                                                                                     6.29
                                                                      116
                     Adeno-associated virus 2, com
                                                                                     6.29
32. AA2CG
                                                             4675
                                                                      116
                     P.falciparum DNA for erythroc
Human DNA for arylsulphatase
                                                                      115
115
                                                                                     6.22
33. PFPPF248
                                                              509
                                                                             203
                                                                             399
34. HSARYLA
                                                             3637
35. BACMSQB
                     B.thuringiensis insecticidal
                                                             3753
                                                                      115
                                                                              422
                                                                                     6.22
                    Human fibroblast growth facto
Rhesus monkey p53 mRNA sequen
X.laevis AE-III mRNA for pept
{variable DNA region EhVR1} [
36. HUMFGFAA
37. MACP53A
                                                             3901
                                                                                     6.22
                                                                             418
                                                                      115
                                                             2184
                                                                      114
                                                                             416
                                                                                     6.14
38. XLAEIIIM
                                                                      114
                                                                             427
                                                             3618
                                                                                     6.14
39. 567111
                                                             1669
                                                                             392
                                                                                              0
                                                                      113
                                                                                     6.07
40. HSDAO
                     H.sapiens diamine oxidase gen
                                                             9903
                                                                      113
                                                                             417
                                                                                     6.07
```

1. FURM-969863-FIG2.SEQ (1-987) Human placental tissue factor (two forms) mRNA, co HUMTFP

LOCUS DEFINITION HUMTFP 2141 bp ss-ARNA PRI 15-JUN-1988 Human placental tissue factor (two forms) mRNA, complete cds. ACCESSION J02931 J02681 KEYWORDS membrane-bound glycoprotein; procoagulant protein; tissue factor. Human placenta, cDNA to mRNA, clones lambda-[10,3 and 10,4] [2]; fibroblast cell line WI38, cDNA to mRNA, library of J.Sorge, clones SOURCE lambda-CTF[2,3,4,5,22,23].

ORGANISM Homo sapiens

Eukaryota; Animalia; Chordata; Vertebrata; Mammalia; Theria; Eutheria; Primates; Haplorhini; Catarrhini; Hominidae.

REFERENCE (bases 79 to 1061)

AUTHORS

Morrissey, J.H., Fakhrai, H. and Edgington, T.S. Molecular cloning of the cDNA for tissue factor, the cellular TITLE receptor for the initiation of the coagulation protease cascade Cell 50, 129-135 (1987)

JOURNAL

full automatic STANDARD REFERENCE (bases 1 to 2141)

Spicer, E.K., Horton, R., Bloem, L.J., Bach, R., Williams, K.R.,

Guha.A., Kraus.J., Nemerson.Y. and Konigsberg.W.H.

Isolation of cDNA clones coding for human tissue factor: Primary

structure of the protein and cDNA Proc. Natl. Acad. Sci. U.S.A. 84, 5148-5152 (1987)

full automatic STANDARD COMMENT

Draft entry and computer-readable sequence for [2] kindly provided by E.K.Spicer, 03-JUN-1987; and for [1] by J.H.Morrissey, 11-MAY-1987.

Two forms of tissue factor (light and heavy) are thought to be produced by differential cleavage at the 3' end of the signal peptide. The two forms of tissue factor are two amino acids different in length at the amino terminal of the mature protein and are otherwise identical.

A potential polyadenylation signal is located at positions 2119-2124. NCBI gi: 339501

|oration/Aualifiers

FFATURES

AUTHORS

JOURNAL

TITLE